PIONEER SX-34

MODEL

SERVICE MANUAL

PIONEER

ALLEINIMPORT FÜR DEUTSCHLAND
C. MELCHERS & CO., 28 BREMEN 1, SCHLACHTE 39/40, TEL. 31691, TELEX 2448399

Diese Zusammenstellung der Schaltbilder von PIONEER- Receivern soll Ihnen beim Service unserer Geräte helfen, die Ersatzteilbestellung vereinfachen und nicht zuletzt die Lieferzeit verkürzen.

Die Firma PIONEER liefert Ihre Geräte in über 56 Länder mit den verschiedensten Ausführungen. Wir haben uns bei der Zusammenstellung dieser Broschüre auf die Geräte konzentriert, die in der BRD verkauft wurden, doch kann es in dem einen oder anderen Fall vorkommen, dass auch Schaltungen mit aufgeführt sind, die zu anderen Geräteausführungen gehören, aus techn. Gründen jedoch nicht weggelassen werden konnten.

Zur Ersatzteilbestellung noch folgender Hinweis:

Können Sie ein gewünschtes Teil nicht genau bestimmen, geben Sie uns bitte Typ und Seitenzahl des Schaltbildes an, zusätzlich können Sie noch den Platz auf der Zeichnung lokalisieren, indem Sie den Abstand vom unteren Rand und dem rechten Rand der Seite zum gesuchten Teil angeben, damit auch wir das gesuchte Ersatzteil schneller finden.

Mit freundlichen Grüssen
C. Melchers & Co.
-Serviceabteilung-

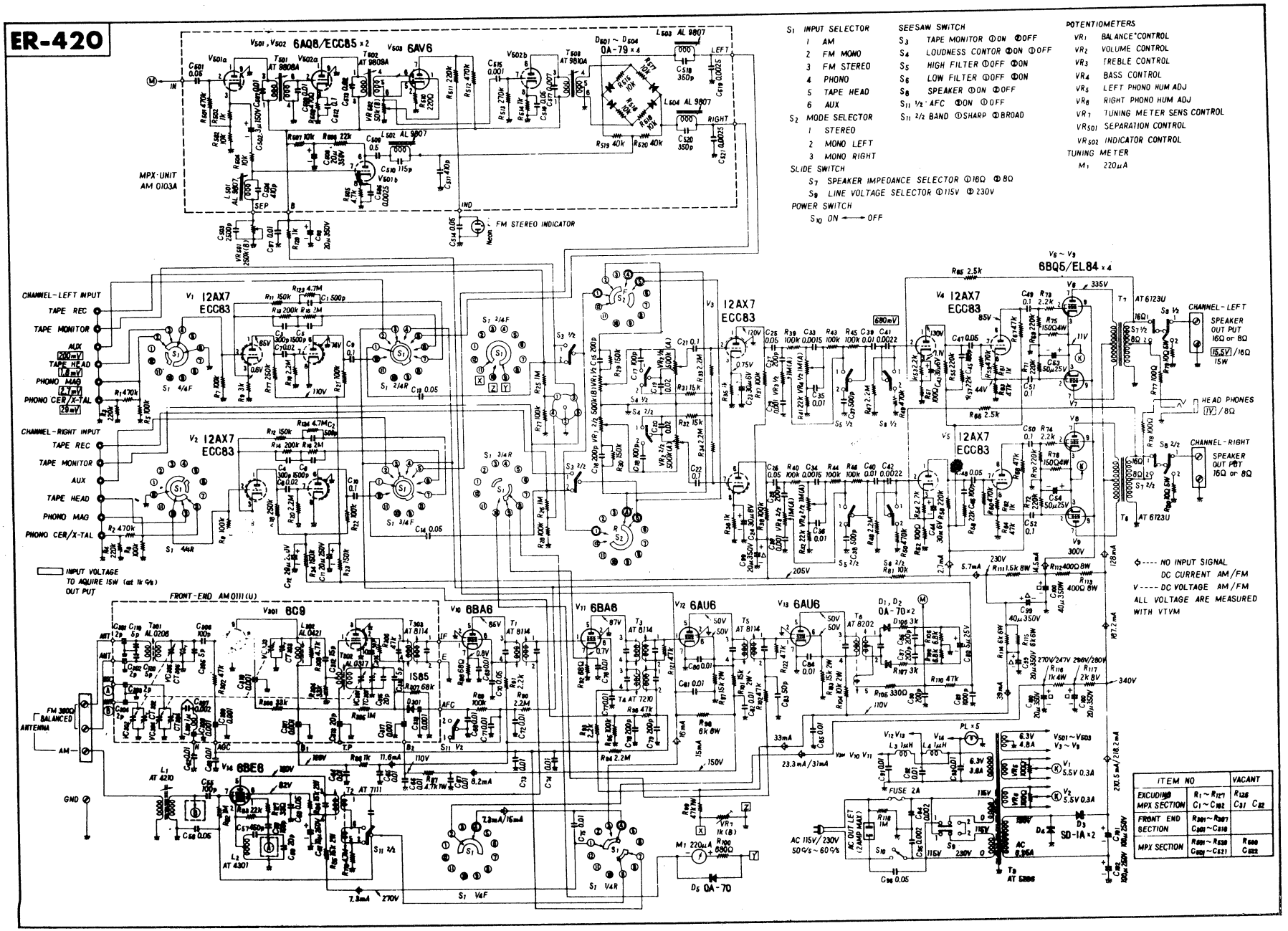
Preis: DM 7,50

Inhaltsverzeichnis (serie 1)

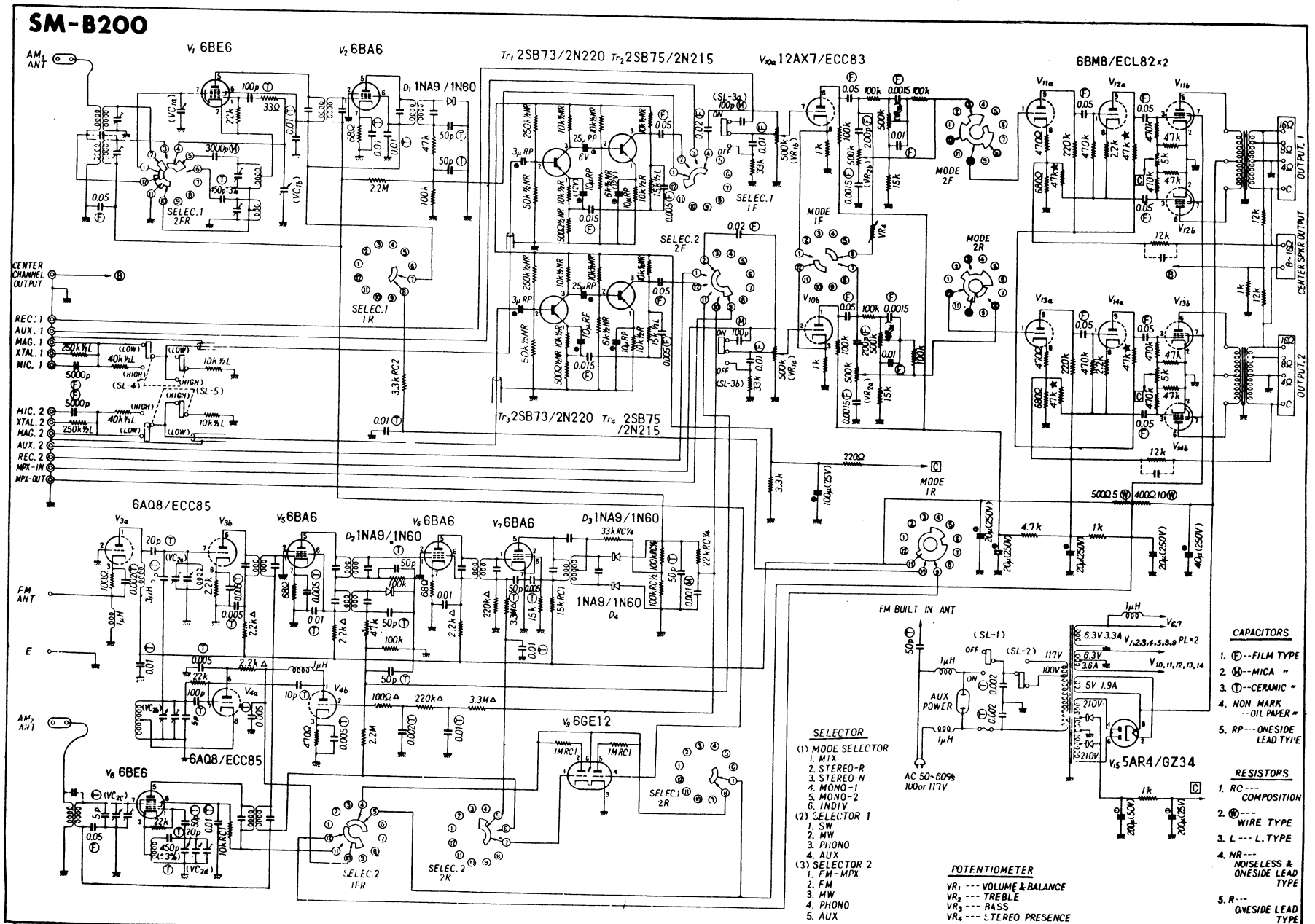
RECEIVER (Röhrentyp)	Seite
ER - 420	1
SM - B 200	2
SM - B 200 A	3
SM - G 204 / G 204 B	4
SM - Q 300 / Q 300 A / Q 300 B	5
SM - 600	6
SX - 34	7
SX - 34 B / 34 Bk	8
SX - 40	9
SX - 82	10
SX - 82 E	11
SX - 800	12
SX - 800 A / SX - 2000	13 / 14

RECEIVER (transistoriert)	Seite
SX - 300 T	15 / 21
SX - 440 / FVW / KC	22 / 27
SX - 525	28 / 31
SX - 600 T	32 / 34
SX - 626	35 / 38
SX - 700 T / F	39 / 43
SX - 770	44 / 49
SX - 990	50 / 57
SX - 1000 T	58 / 60
SX - 1000 TA	61 / 63
SX - 1000 TD	64
SX - 1500 T	65 / 69
SX - 1500 TD	70 / 76
SX - 2500	77 / 83

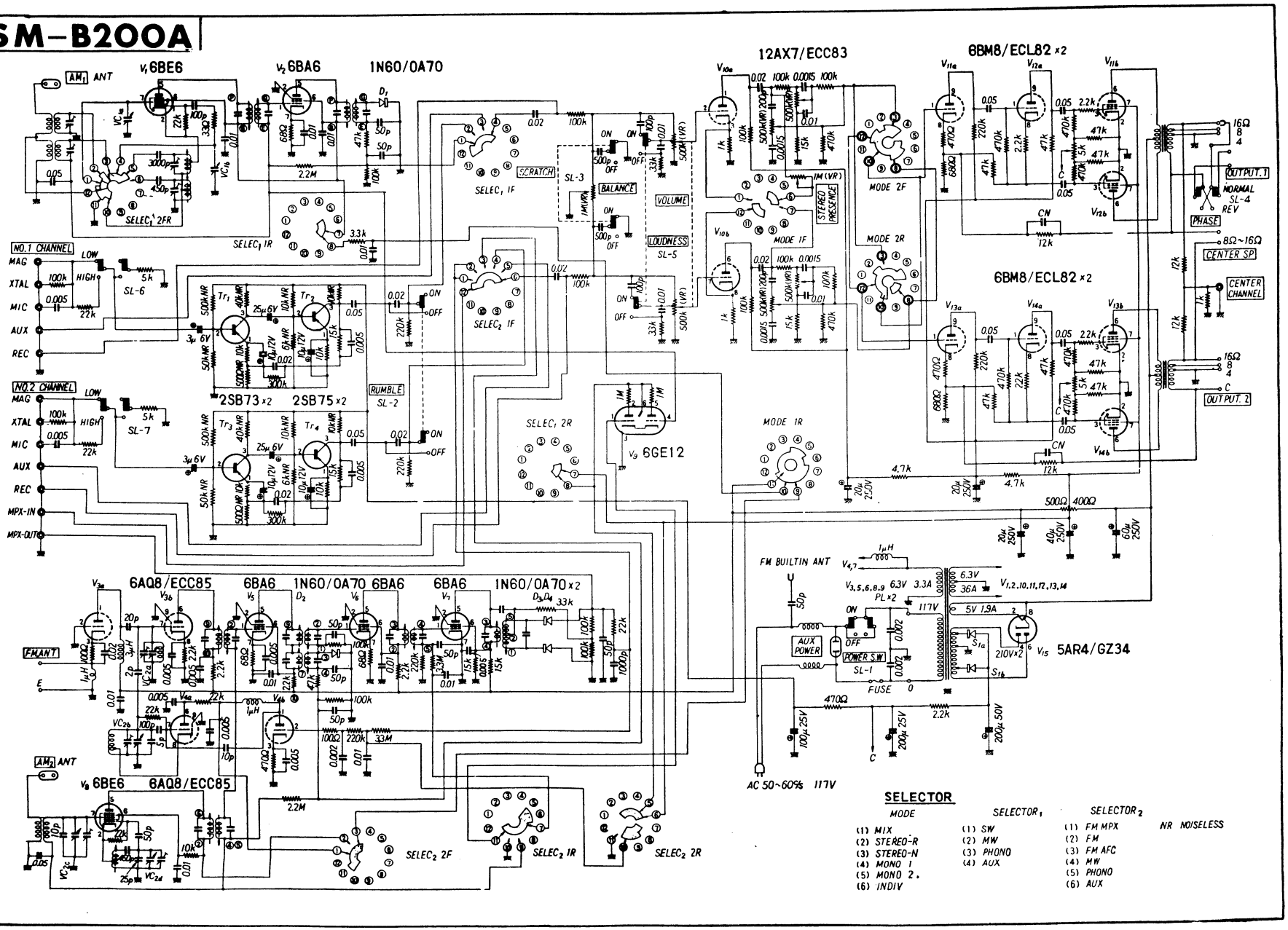
ER-420


MPX-UNIT AM 0103A
FM STEREO INDICATOR
CHANNEL-LEFT INPUT
CHANNEL-RIGHT INPUT
TAPE REC
TAPE MONITOR
AUX
TAPE HEAD
PHONO MAG
PHONO CER/X-TAL
INPUT VOLTAGE TO AQUIRE 15W (at 1k c/s) OUT PUT
FRONT-END AM 0111(U)
FM 300Ω BALANCED ANTENNA
AM
GND
S1 INPUT SELECTOR
1 AM
2 FM MONO
3 FM STEREO
4 PHONO
5 TAPE HEAD
6 AUX
S2 MODE SELECTOR
1 STEREO
2 MONO LEFT
3 MONO RIGHT
SLIDE SWITCH
S7 SPEAKER IMPEDANCE SELECTOR ①16Ω ②8Ω
S9 LINE VOLTAGE SELECTOR ①115V ②230V
POWER SWITCH
S10 ON ⟷ OFF
SEESAW SWITCH
S3 TAPE MONITOR ①ON ②OFF
S4 LOUDNESS CONTOR ①ON ①OFF
S5 HIGH FILTER ①OFF ②ON
S6 LOW FILTER ①OFF ②ON
S8 SPEAKER ①ON ②OFF
S11 ½ AFC ①ON ①OFF
S11 ½ BAND ①SHARP ②BROAD
POTENTIOMETERS
VR1 BALANCE CONTROL
VR2 VOLUME CONTROL
VR3 TREBLE CONTROL
VR4 BASS CONTROL
VR5 LEFT PHONO HUM ADJ
VR6 RIGHT PHONO HUM ADJ
VR7 TUNING METER SENS CONTROL
VRS01 SEPARATION CONTROL
VRS02 INDICATOR CONTROL
TUNING METER
M1 220μA
⟵ NO INPUT SIGNAL DC CURRENT AM/FM
V ---- DC VOLTAGE AM/FM
ALL VOLTAGE ARE MEASURED WITH VTVM
ITEM NO
EXCUDING MPX SECTION
FRONT END SECTION
MPX SECTION
VACANT
CHANNEL-LEFT SPEAKER OUT PUT 16Ω or 8Ω 15W
CHANNEL-RIGHT SPEAKER OUT PUT 16Ω or 8Ω
HEAD PHONES
AC OUT LET (2 AMP MAX)
FUSE 2A

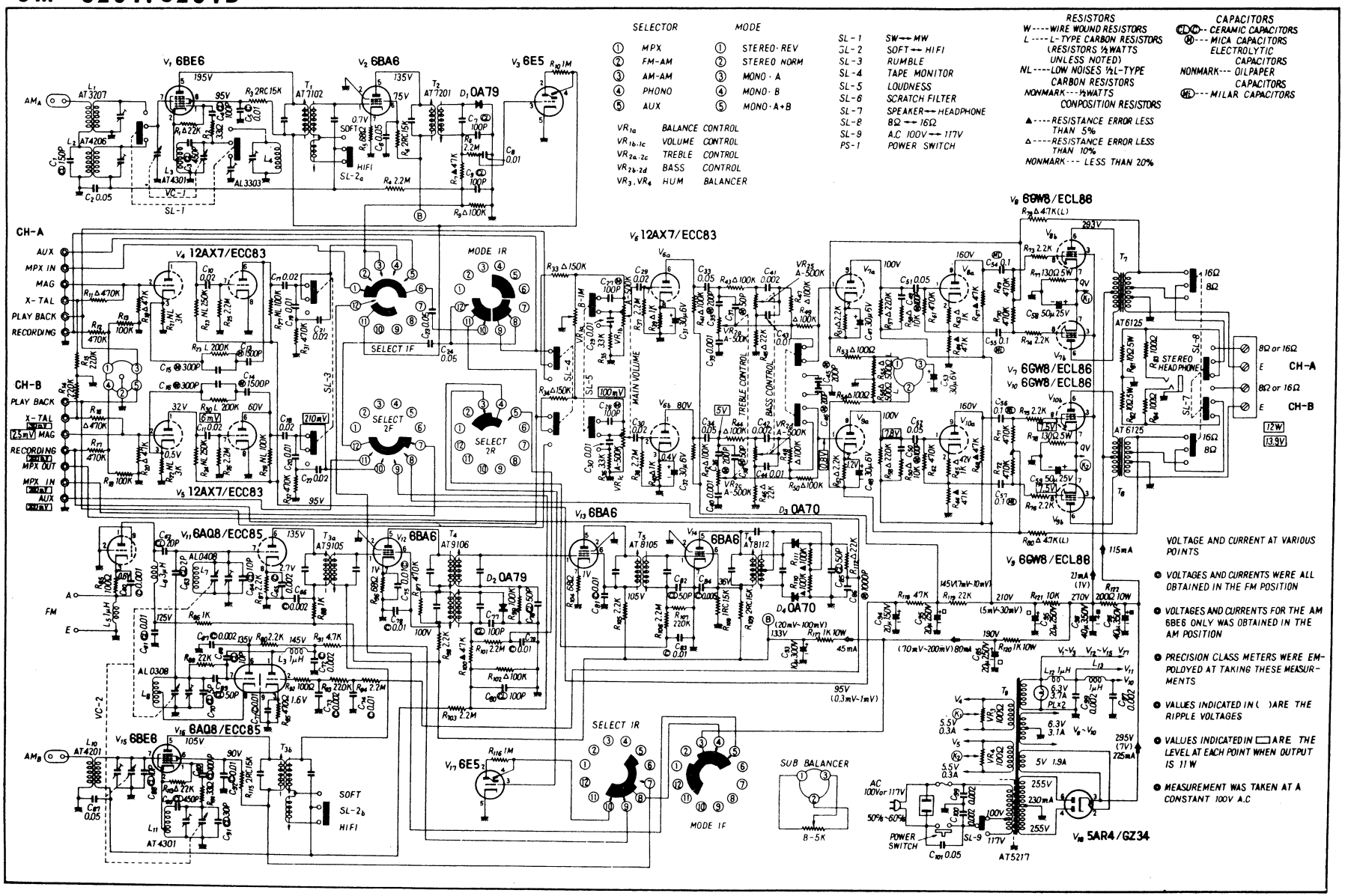
SM-B200


V1 6BE6
V2 6BA6
D1 1NA9 / 1N60
Tr1 2SB73/2N220 Tr2 2SB75/2N215
V10a 12AX7/ECC83
6BM8/ECL82×2
AM1 ANT
SELEC.1 2FR
SELEC.1 1R
SELEC.2 2F
SELEC.1 1F
MODE 1F
MODE 2F
MODE 2R
MODE 1R
CENTER CHANNEL OUTPUT
REC. 1
AUX. 1
MAG. 1
XTAL. 1
MIC. 1
MIC. 2
XTAL. 2
MAG. 2
AUX. 2
REC. 2
MPX-IN
MPX-OUT
Tr3 2SB73/2N220 Tr4 2SB75 /2N215
6AQ8/ECC85
V5 6BA6
V6 6BA6
V7 6BA6
D3 1NA9/1N60
D2 1NA9/1N60
1NA9/1N60 D4
FM ANT
E
AM2 ANT
V8 6BE6
6AQ8/ECC85
V9 6GE12
SELEC.2 1FR
SELEC.2 2R
SELEC.1 2R
FM BUILT IN ANT
AUX POWER
AC 50~60% 100or 117V
V15 5AR4/GZ34
OUTPUT.1
OUTPUT.2
CENTER SPKR OUTPUT
SELECTOR
(1) MODE SELECTOR
1. MIX
2. STEREO-R
3. STEREO-N
4. MONO-1
5. MONO-2
6. INDIV
(2) SELECTOR 1
1. SW
2. MW
3. PHONO
4. AUX
(3) SELECTOR 2
1. FM-MPX
2. FM
3. MW
4. PHONO
5. AUX
POTENTIOMETER
VR1 --- VOLUME & BALANCE
VR2 --- TREBLE
VR3 --- BASS
VR4 --- STEREO PRESENCE
CAPACITORS
1. (F)--FILM TYPE
2. (M)--MICA "
3. (T)--CERAMIC "
4. NON MARK --OIL PAPER "
5. RP---ONESIDE LEAD TYPE
RESISTORS
1. RC--- COMPOSITION
2. (W)--- WIRE TYPE
3. L --- L. TYPE
4. NR--- NOISELESS & ONESIDE LEAD TYPE
5. R--- ONESIDE LEAD TYPE

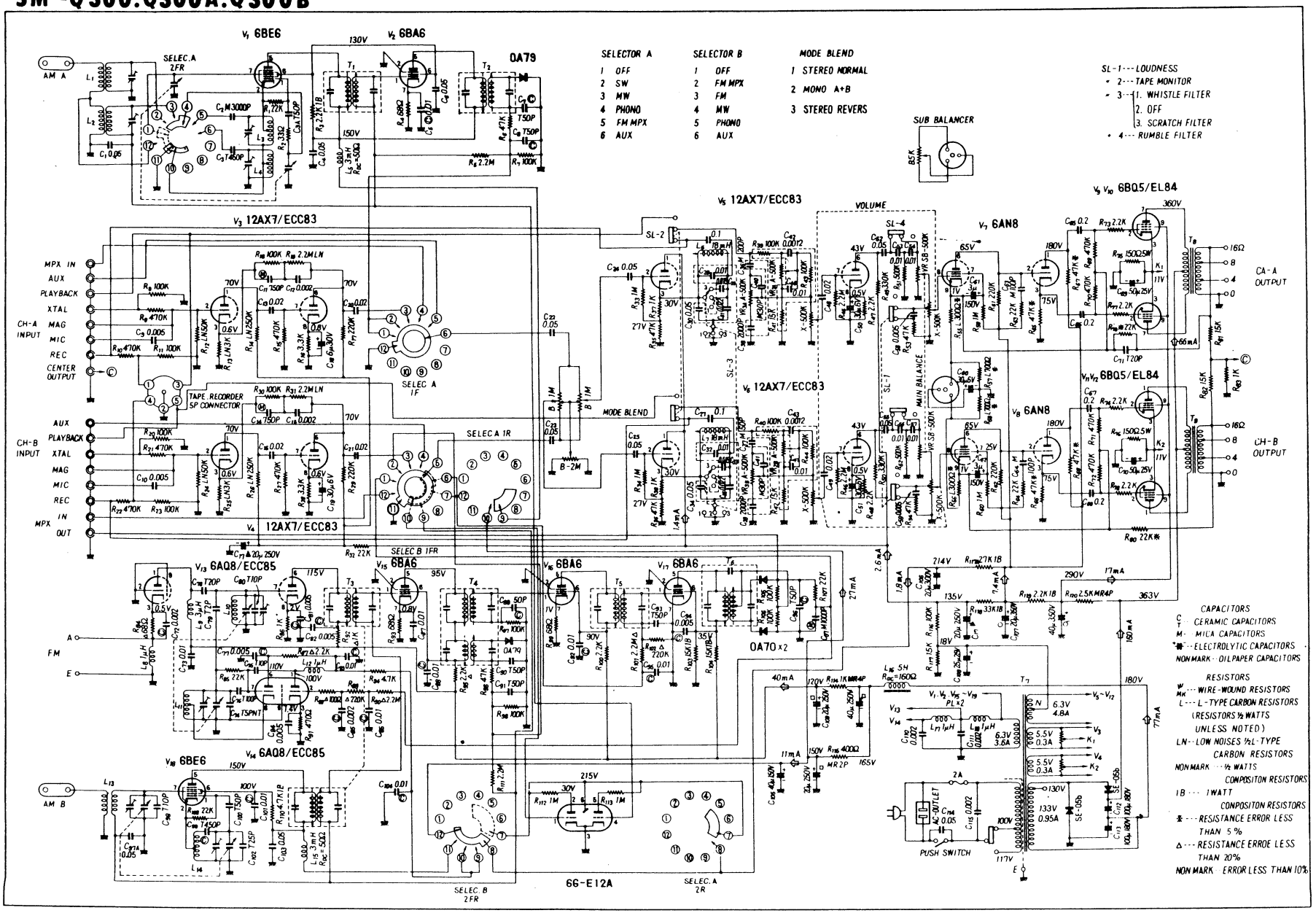
SM-B200A

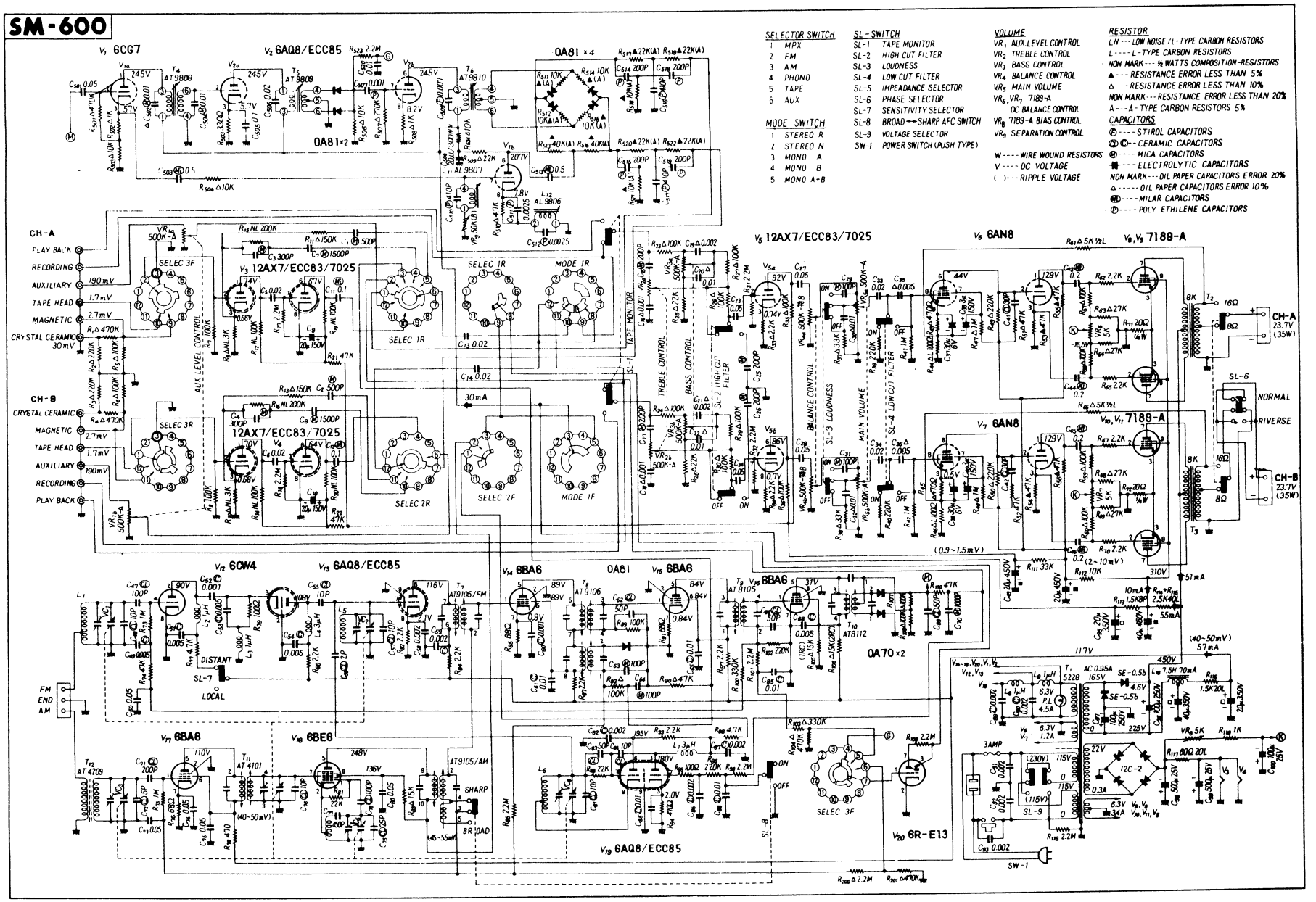

V1 6BE6
V2 6BA6
1N60/0A70
12AX7/ECC83
6BM8/ECL82 x2
AM1 ANT
SELEC1 2FR
SELEC1 1R
SELEC1 1F
SCRATCH
SL-3
BALANCE
VOLUME
LOUDNESS
SL-5
STEREO PRESENCE
MODE 2F
MODE 1F
MODE 2R
NO.1 CHANNEL
MAG
XTAL
MIC
AUX
REC
LOW
HIGH
SL-6
2SB73 x2
2SB75 x2
SELEC2 1F
RUMBLE
SL-2
NO.2 CHANNEL
SL-7
MPX-IN
MPX-OUT
SELEC1 2R
V9 6GE12
MODE 1R
PHASE
8Ω~16Ω
CENTER SP
CENTER CHANNEL
OUTPUT 1
OUTPUT 2
NORMAL
REV
SL-4
6AQ8/ECC85
6BA6
1N60/0A70 x2
FM ANT
FM BUILTIN ANT
AM2 ANT
V8 6BE6
SELEC2 2F
SELEC2 1R
SELEC2 2R
AUX POWER
POWER SW
SL-1
FUSE
V15 5AR4/GZ34
AC 50~60% 117V
SELECTOR
MODE
(1) MIX
(2) STEREO-R
(3) STEREO-N
(4) MONO 1
(5) MONO 2.
(6) INDIV
SELECTOR1
(1) SW
(2) MW
(3) PHONO
(4) AUX
SELECTOR2
(1) FM MPX
(2) FM
(3) FM AFC
(4) MW
(5) PHONO
(6) AUX
NR NOISELESS

SM-G204.G204B

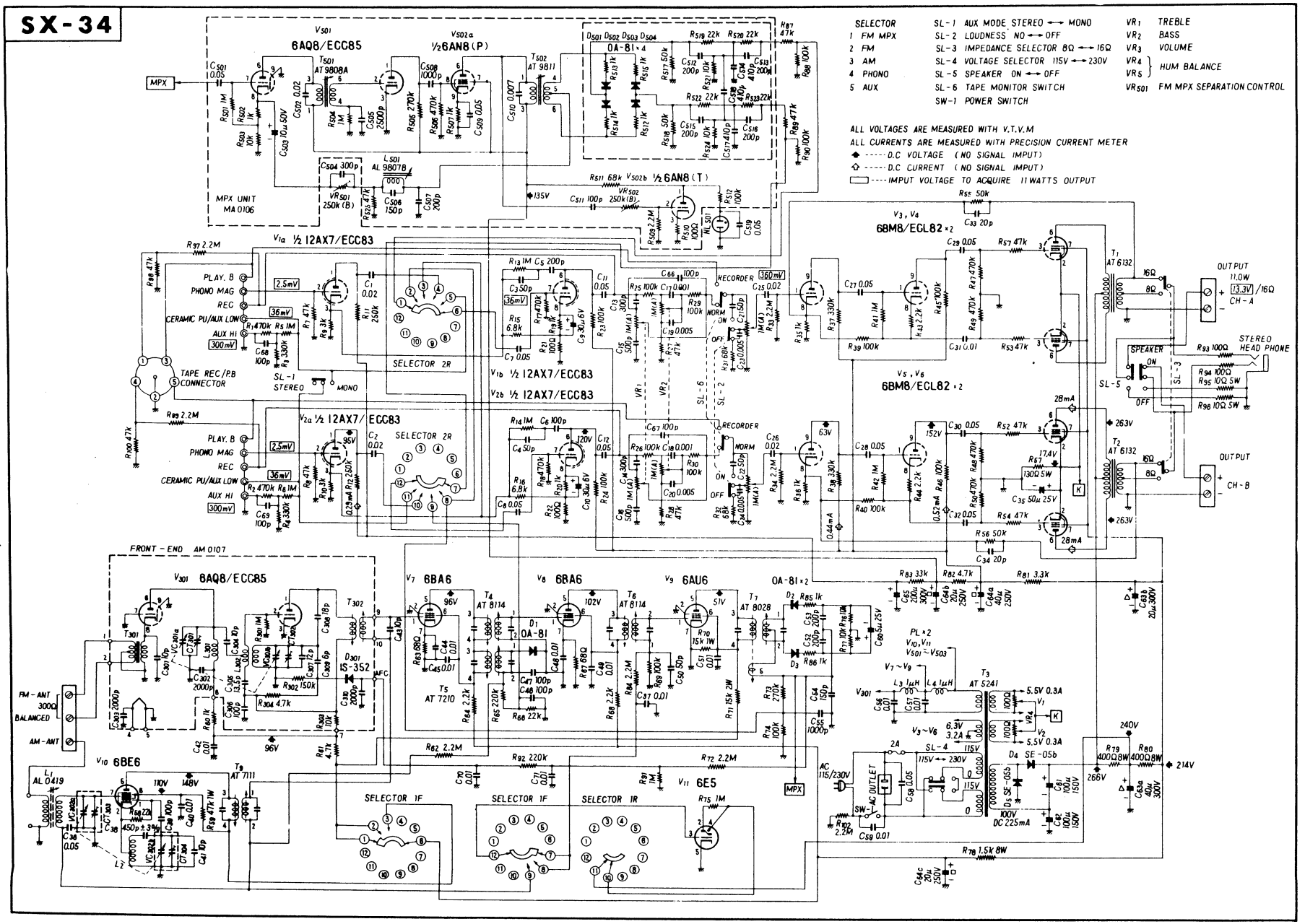


SM—Q300.Q300A.Q300B

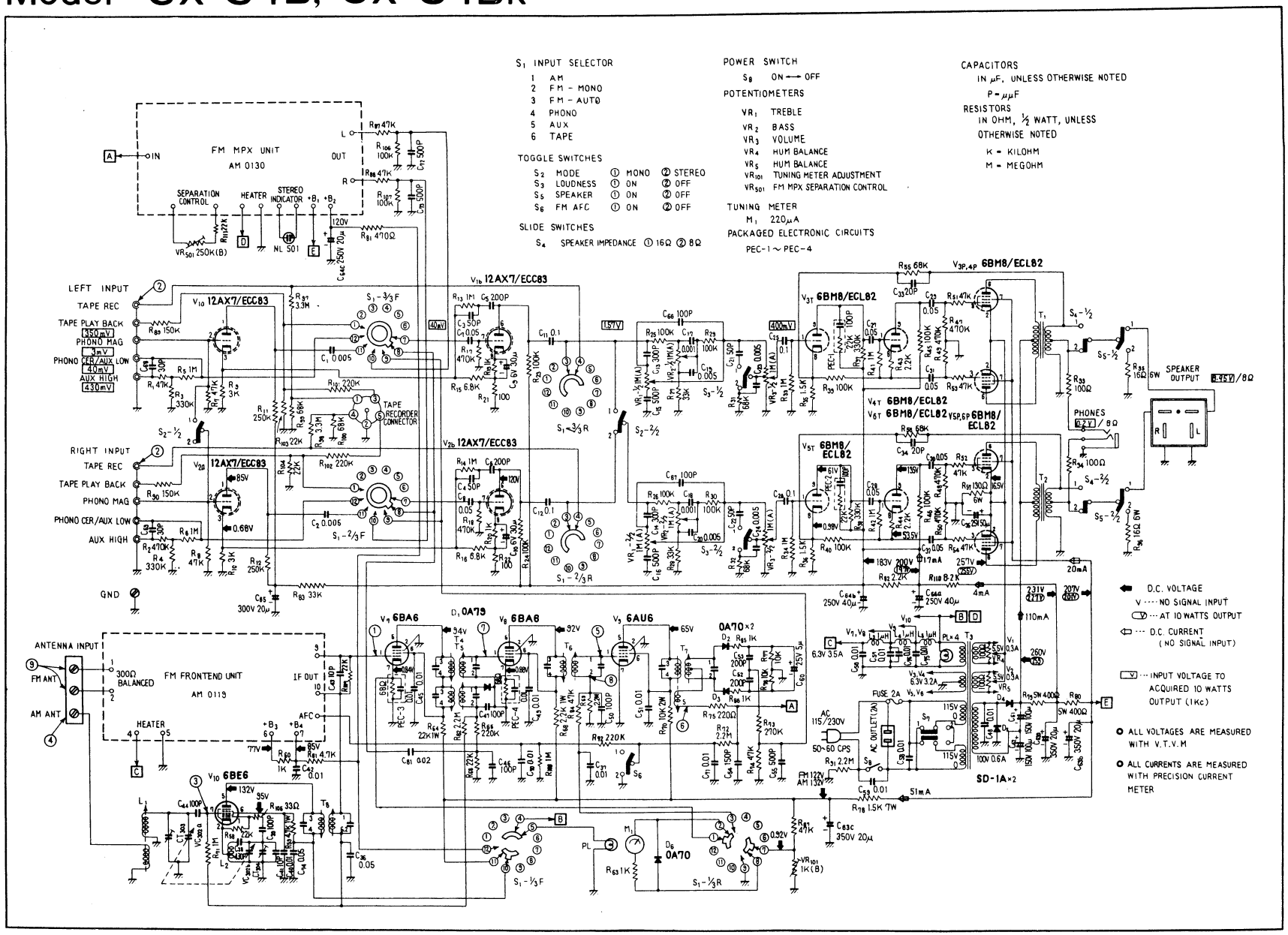



SM-600
V1 6CG7
V2 6AQ8/ECC85
0A81 ×4
0A81×2
V3 12AX7/ECC83/7025
V4 12AX7/ECC83/7025
V5 12AX7/ECC83/7025
V6 6AN8
V7 6AN8
V8,V9 7188-A
V10,V11 7189-A
V12 6CW4
V13 6AQ8/ECC85
V14 6BA6
0A81
V15 6BA6
V16 6BA6
0A70×2
V17 6BA8
V18 6BE8
V19 6AQ8/ECC85
V20 6R-E13
SELECTOR SWITCH
1 MPX
2 FM
3 AM
4 PHONO
5 TAPE
6 AUX
MODE SWITCH
1 STEREO R
2 STEREO N
3 MONO A
4 MONO B
5 MONO A+B
SL-SWITCH
SL-1 TAPE MONITOR
SL-2 HIGH CUT FILTER
SL-3 LOUDNESS
SL-4 LOW CUT FILTER
SL-5 IMPEADANCE SELECTOR
SL-6 PHASE SELECTOR
SL-7 SENSITIVITY SELECTOR
SL-8 BROAD ⇔ SHARP AFC SWITCH
SL-9 VOLTAGE SELECTOR
SW-1 POWER SWITCH (PUSH TYPE)
VOLUME
VR1 AUX LEVEL CONTROL
VR2 TREBLE CONTROL
VR3 BASS CONTROL
VR4 BALANCE CONTROL
VR5 MAIN VOLUME
VR6,VR7 7189-A DC BALANCE CONTROL
VR8 7189-A BIAS CONTROL
VR9 SEPARATION CONTROL
W ---- WIRE WOUND RESISTORS
V ---- DC VOLTAGE
( ) --- RIPPLE VOLTAGE
RESISTOR
LN --- LOW NOISE L-TYPE CARBON RESISTORS
L ---- L-TYPE CARBON RESISTORS
NON MARK --- ½ WATTS COMPOSITION-RESISTORS
▲ --- RESISTANCE ERROR LESS THAN 5%
△ --- RESISTANCE ERROR LESS THAN 10%
NON MARK --- RESISTANCE ERROR LESS THAN 20%
A --- A-TYPE CARBON RESISTORS 5%
CAPACITORS
(F) ---- STIROL CAPACITORS
(CC)(C) -- CERAMIC CAPACITORS
(M) ---- MICA CAPACITORS
(E) ---- ELECTROLYTIC CAPACITORS
NON MARK --- OIL PAPER CAPACITORS ERROR 20%
△ ----- OIL PAPER CAPACITORS ERROR 10%
(MT) ---- MILAR CAPACITORS
(P) ---- POLY ETHILENE CAPACITORS
CH-A
CH-B
PLAY BACK
RECORDING
AUXILIARY
TAPE HEAD
MAGNETIC
CRYSTAL CERAMIC
SELEC 3F
SELEC 1F
SELEC 1R
SELEC 2R
SELEC 2F
MODE 1R
MODE 1F
AUX LEVEL CONTROL
TAPE MONITOR
TREBLE CONTROL
BASS CONTROL
SL-2 HIGH-CUT FILTER
SL-3 LOUDNESS
BALANCE CONTROL
MAIN VOLUME
SL-4 LOW CUT FILTER
SL-6
NORMAL
RIVERSE
CH-A 23.7V (35W)
CH-B 23.7V (35W)
FM
END
AM
DISTANT
LOCAL
SL-7
SHARP
BROAD
SELEC 3F
SW-1
SL-9
117V
(230V)
115V
(115V)
0.3A
6.3V 3.4A
3AMP
12C-2
AC 0.95A
165V
SE-0.5b
6.3V 1.2A
6.3V P.L 4.5A
450V
225V
22V
8K
16Ω
8Ω
30mA
51mA
55mA
57mA
(0.9~1.5mV)
(2~10mV)
(40~50mV)
(40~50mV)
(45~55mV)

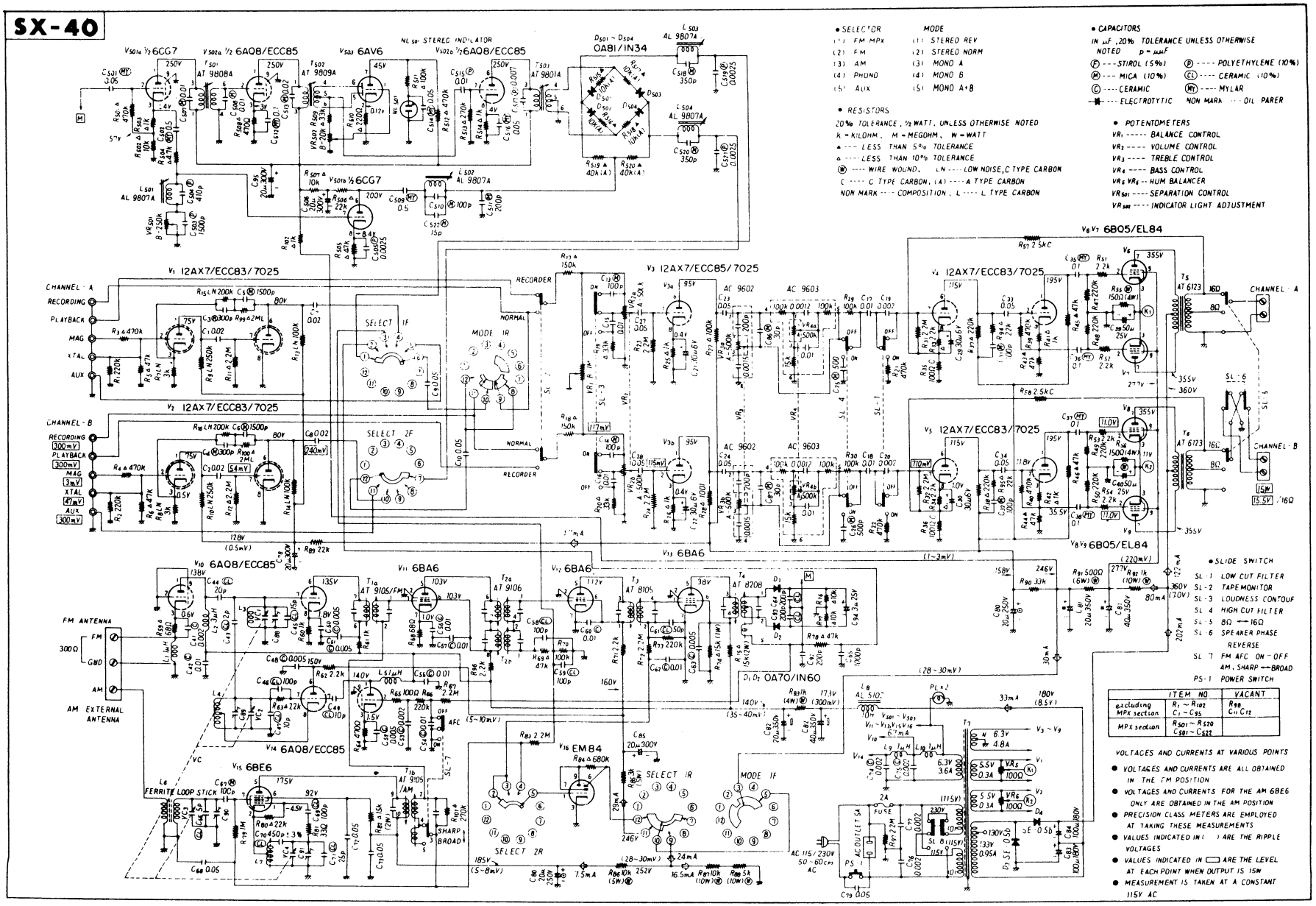
SX-34


SELECTOR
1 FM MPX
2 FM
3 AM
4 PHONO
5 AUX
SL-1 AUX MODE STEREO ⟷ MONO
SL-2 LOUDNESS NO ⟷ OFF
SL-3 IMPEDANCE SELECTOR 8Ω ⟷ 16Ω
SL-4 VOLTAGE SELECTOR 115V ⟷ 230V
SL-5 SPEAKER ON ⟷ OFF
SL-6 TAPE MONITOR SWITCH
SW-1 POWER SWITCH
VR1 TREBLE
VR2 BASS
VR3 VOLUME
VR4, VR5 HUM BALANCE
VR501 FM MPX SEPARATION CONTROL
ALL VOLTAGES ARE MEASURED WITH V.T.V.M
ALL CURRENTS ARE MEASURED WITH PRECISION CURRENT METER
D.C VOLTAGE (NO SIGNAL IMPUT)
D.C CURRENT (NO SIGNAL IMPUT)
IMPUT VOLTAGE TO ACQUIRE 11 WATTS OUTPUT
MPX UNIT MA 0106
FRONT-END AM 0107
V501 6AQ8/ECC85
V502a ½6AN8 (P)
V502b ½ 6AN8 (T)
V1a ½ 12AX7/ECC83
V1b ½ 12AX7/ECC83
V2a ½ 12AX7/ECC83
V2b ½ 12AX7/ECC83
V3, V4 6BM8/ECL82 ×2
V5, V6 6BM8/ECL82 ×2
V301 6AQ8/ECC85
V7 6BA6
V8 6BA6
V9 6AU6
V10 6BE6
V11 6E5
OA-81 ×4
OA-81 ×2
PL ×2 V10, V11 V501 ~ V503
V7 ~ V9
V3 ~ V6
PLAY. B
PHONO MAG
REC
CERAMIC PU/AUX LOW
AUX HI
TAPE REC/PB CONNECTOR
SELECTOR 2R
SELECTOR 1F
SELECTOR 1R
RECORDER
SPEAKER
STEREO HEAD PHONE
OUTPUT 11.0W CH-A
OUTPUT CH-B
FM-ANT 300Ω BALANCED
AM-ANT
AFC
AC 115/230V
AC OUTLET
DC 225mA
MPX

Model SX-34B, SX-34Bk



SX-40



• SELECTOR	MODE		
(1)	FM MPX	(1)	STEREO REV
(2)	FM	(2)	STEREO NORM
(3)	AM	(3)	MONO A
(4)	PHONO	(4)	MONO B
(5)	AUX	(5)	MONO A+B

• RESISTORS

20% TOLERANCE, ½ WATT, UNLESS OTHERWISE NOTED
K = KILOHM, M = MEGOHM, W = WATT
▲ --- LESS THAN 5% TOLERANCE
△ --- LESS THAN 10% TOLERANCE
(W) --- WIRE WOUND, LN --- LOW NOISE, C TYPE CARBON
C --- C TYPE CARBON, (A) --- A TYPE CARBON
NON MARK --- COMPOSITION, L --- L TYPE CARBON

• CAPACITORS

IN μF, ±20% TOLERANCE UNLESS OTHERWISE NOTED p = μμF

(F) --- STIROL (5%) (P) --- POLYETHYLENE (10%)
(M) --- MICA (10%) (CL) --- CERAMIC (10%)
(C) --- CERAMIC (MY) --- MYLAR
--- ELECTROLYTIC NON MARK --- OIL PAPER

• POTENTIOMETERS

VR1 ----- BALANCE CONTROL
VR2 ---- VOLUME CONTROL
VR3 ---- TREBLE CONTROL
VR4 ---- BASS CONTROL
VR5 VR6 -- HUM BALANCER
VR501 ---- SEPARATION CONTROL
VR502 ---- INDICATOR LIGHT ADJUSTMENT

• SLIDE SWITCH

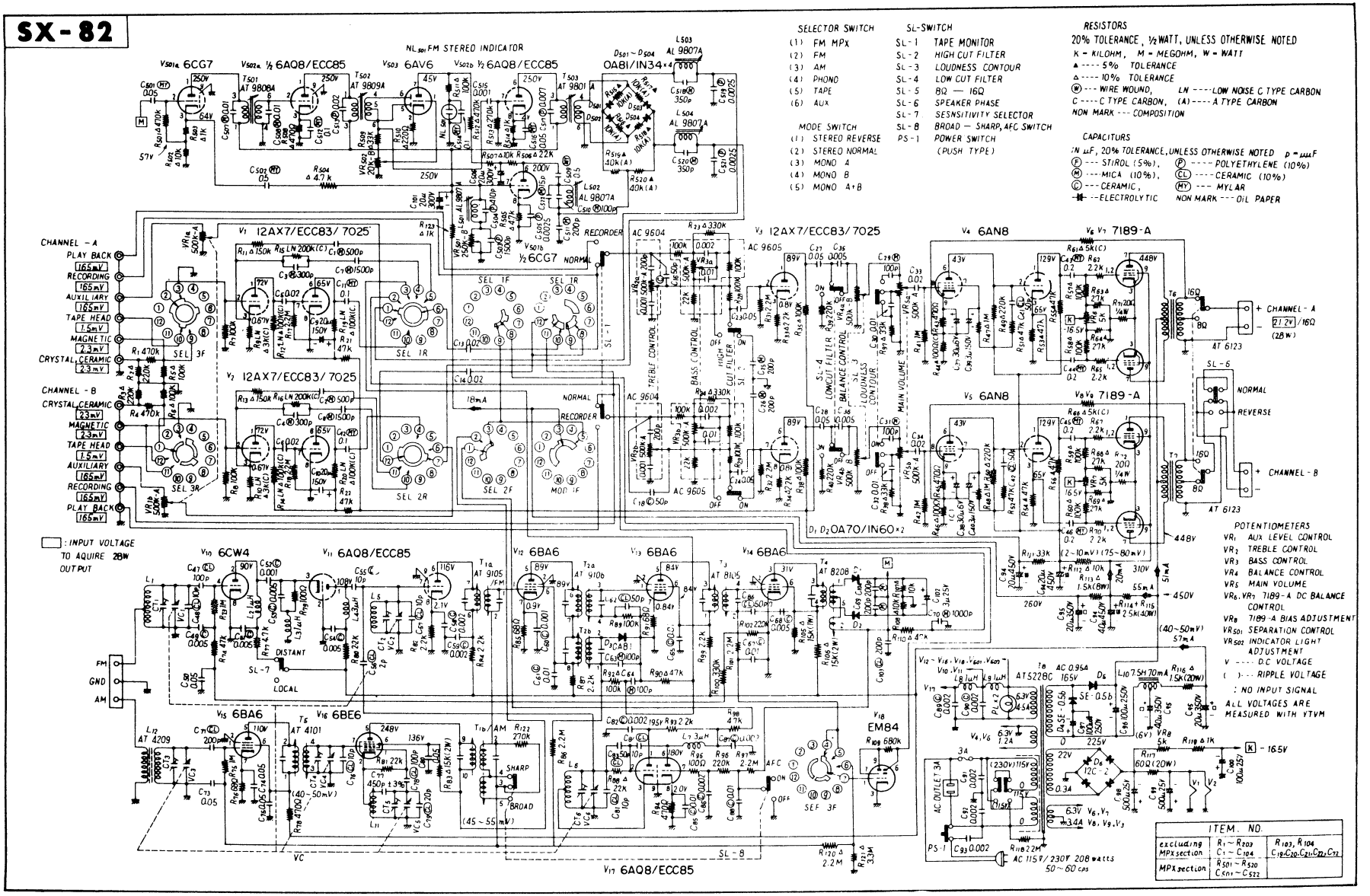
SL-1 LOW CUT FILTER
SL-2 TAPE MONITOR
SL-3 LOUDNESS CONTOUR
SL-4 HIGH CUT FILTER
SL-5 8Ω ⟷ 16Ω SPEAKER PHASE REVERSE
SL-6 FM AFC ON-OFF
SL-7 AM, SHARP ⟷ BROAD
PS-1 POWER SWITCH

	ITEM NO	VACANT
excluding MPX section	$R_1 \sim R_{102}$	R_{88}
	$C_1 \sim C_{95}$	C_{11} C_{12}
MPX section	$R_{501} \sim R_{520}$	
	$C_{501} \sim C_{522}$	

VOLTAGES AND CURRENTS AT VARIOUS POINTS

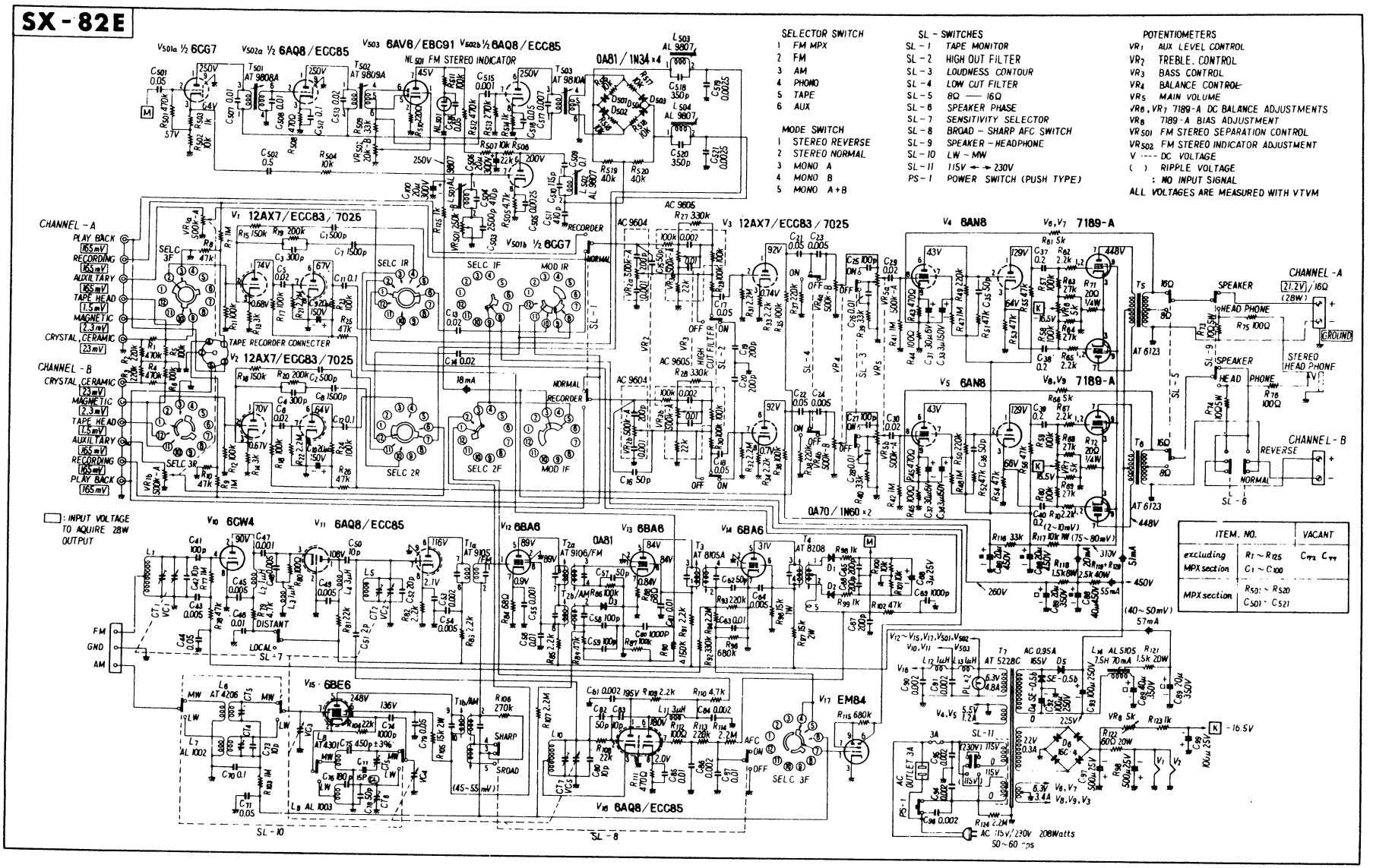
- VOLTAGES AND CURRENTS ARE ALL OBTAINED IN THE FM POSITION
- VOLTAGES AND CURRENTS FOR THE AM 6BE6 ONLY ARE OBTAINED IN THE AM POSITION
- PRECISION CLASS METERS ARE EMPLOYED AT TAKING THESE MEASUREMENTS
- VALUES INDICATED IN ( ) ARE THE RIPPLE VOLTAGES
- VALUES INDICATED IN ▭ ARE THE LEVEL AT EACH POINT WHEN OUTPUT IS 15W
- MEASUREMENT IS TAKEN AT A CONSTANT 115V AC

Weitere Unterlagen leider nicht vorhanden

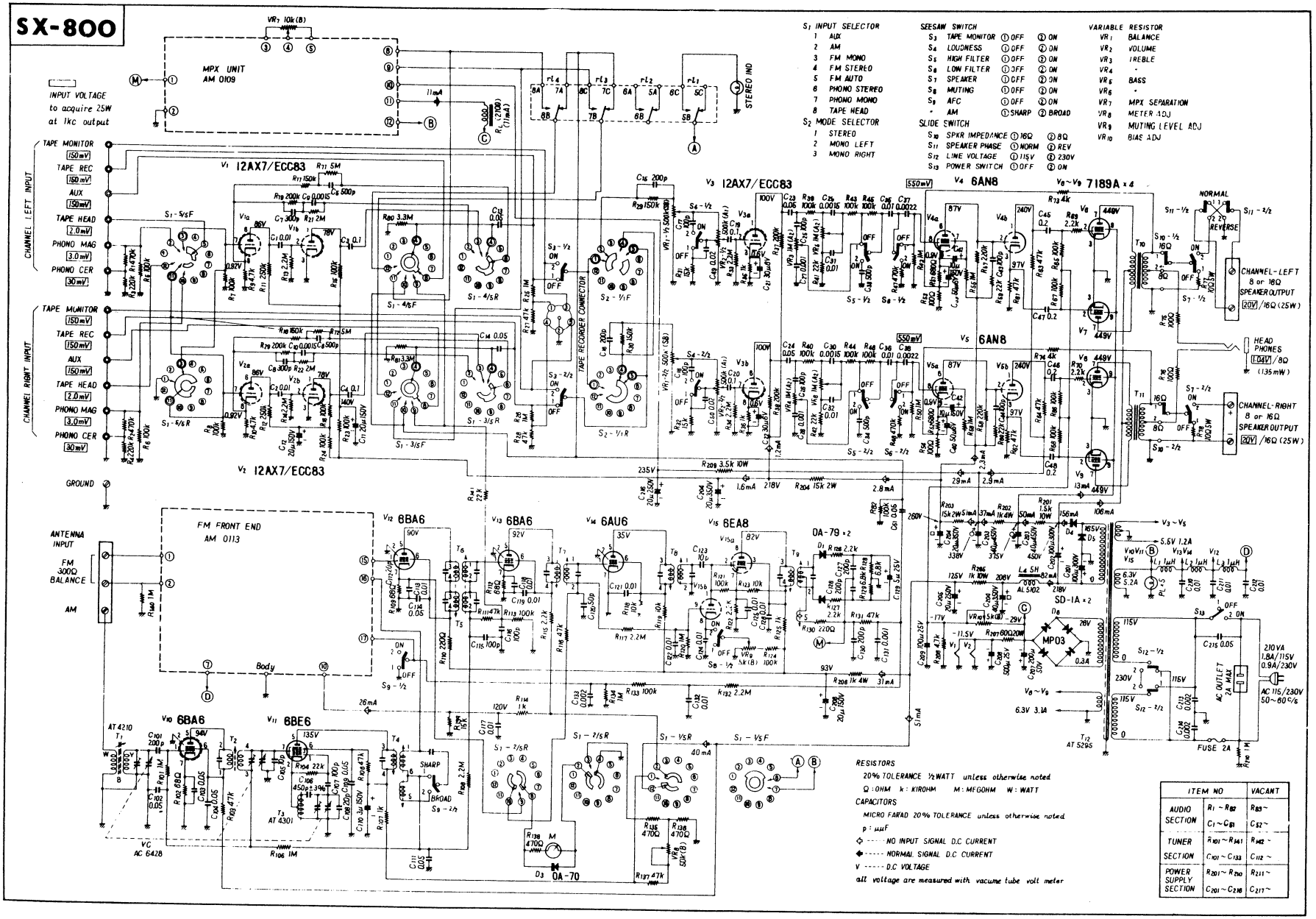


10

SX-82E

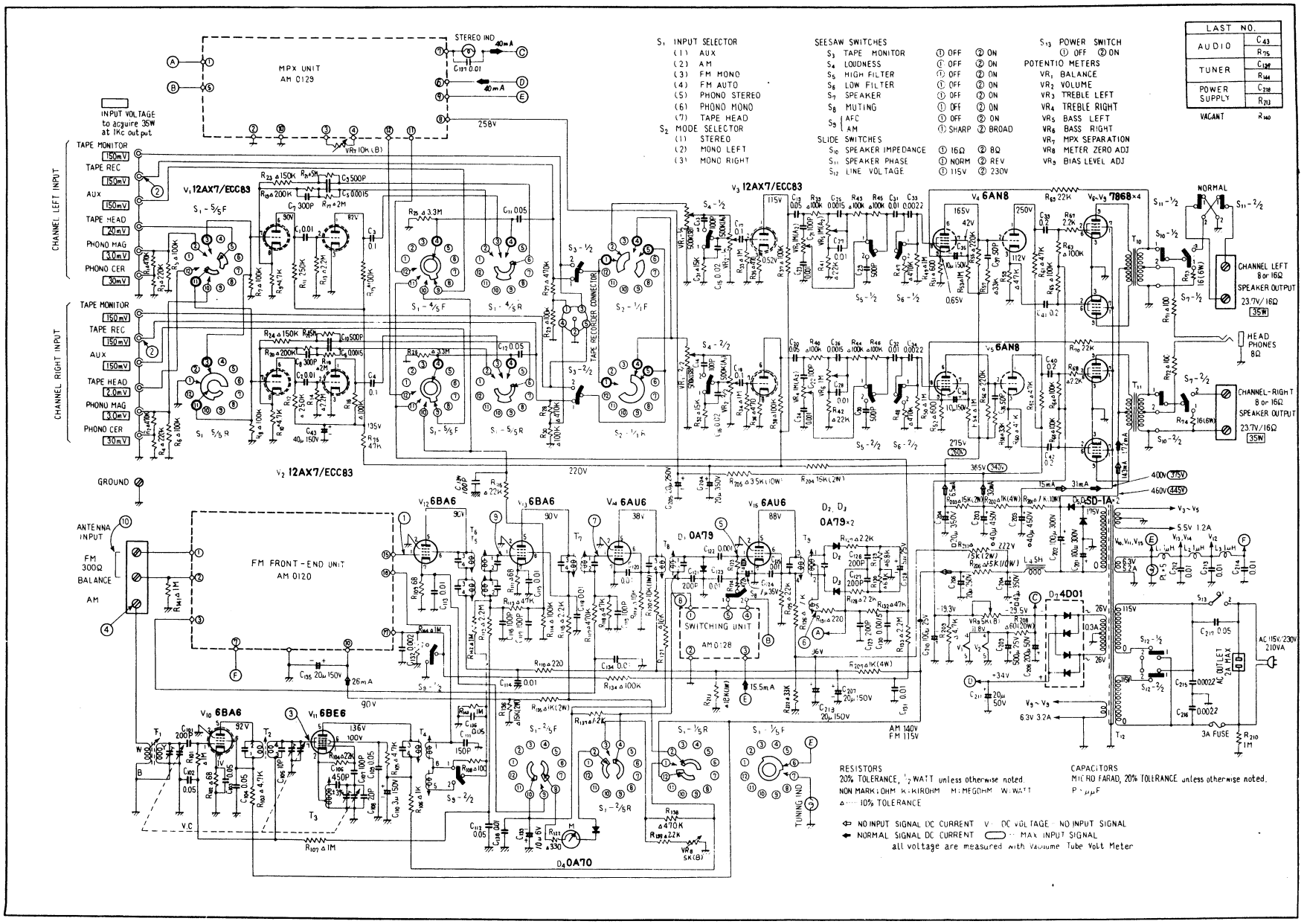

SELECTOR SWITCH
1 FM MPX
2 FM
3 AM
4 PHONO
5 TAPE
6 AUX
MODE SWITCH
1 STEREO REVERSE
2 STEREO NORMAL
3 MONO A
4 MONO B
5 MONO A+B
SL - SWITCHES
SL-1 TAPE MONITOR
SL-2 HIGH OUT FILTER
SL-3 LOUDNESS CONTOUR
SL-4 LOW CUT FILTER
SL-5 8Ω — 16Ω
SL-6 SPEAKER PHASE
SL-7 SENSITIVITY SELECTOR
SL-8 BROAD - SHARP AFC SWITCH
SL-9 SPEAKER - HEADPHONE
SL-10 LW - MW
SL-11 115V ←→ 230V
PS-1 POWER SWITCH (PUSH TYPE)
POTENTIOMETERS
VR1 AUX LEVEL CONTROL
VR2 TREBLE CONTROL
VR3 BASS CONTROL
VR4 BALANCE CONTROL
VR5 MAIN VOLUME
VR6, VR7 7189-A DC BALANCE ADJUSTMENTS
VR8 7189-A BIAS ADJUSTMENT
VR501 FM STEREO SEPARATION CONTROL
VR502 FM STEREO INDICATOR ADJUSTMENT
V ---- DC VOLTAGE
( ) RIPPLE VOLTAGE
: NO INPUT SIGNAL
ALL VOLTAGES ARE MEASURED WITH VTVM
CHANNEL - A
CHANNEL - B
PLAY BACK
RECORDING
AUXILIARY
TAPE HEAD
MAGNETIC
CRYSTAL, CERAMIC
TAPE RECORDER CONNECTER
SPEAKER
HEAD PHONE
STEREO HEAD PHONE
REVERSE
NORMAL
GROUND
FM
GND
AM
LOCAL
DISTANT
SHARP
BROAD
AFC
AC OUTLET 3A
AC 115V/230V 208Watts
50~60 cps
: INPUT VOLTAGE TO AQUIRE 28W OUTPUT
ITEM. NO. | VACANT
excluding MPX section | R1 ~ R125 | C111 C117
C1 ~ C100
MPX section | R501 ~ R520
C501 ~ C521

SX-800

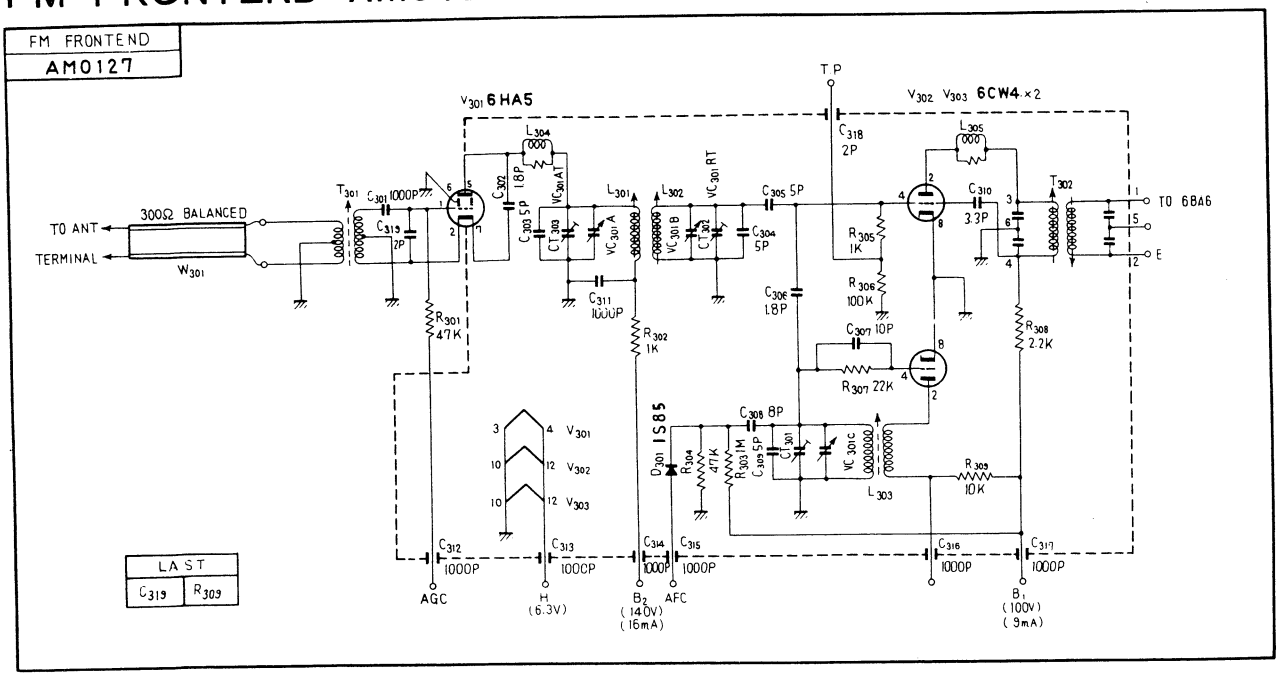


ITEM NO		VACANT
AUDIO SECTION	$R_1 \sim R_{82}$	$R_{83} \sim$
	$C_1 \sim C_{81}$	$C_{82} \sim$
TUNER SECTION	$R_{101} \sim R_{141}$	$R_{142} \sim$
	$C_{101} \sim C_{133}$	$C_{112} \sim$
POWER SUPPLY SECTION	$R_{201} \sim R_{210}$	$R_{211} \sim$
	$C_{201} \sim C_{216}$	$C_{217} \sim$

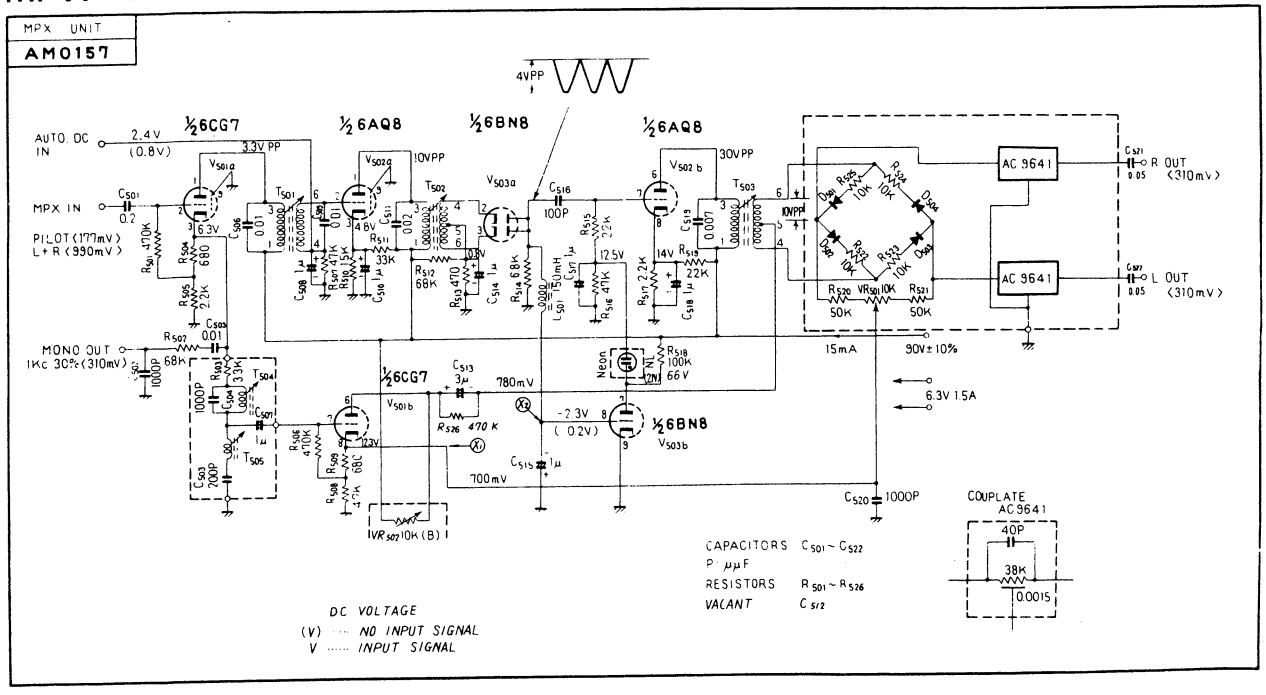
Model SX-800A, SX-2000



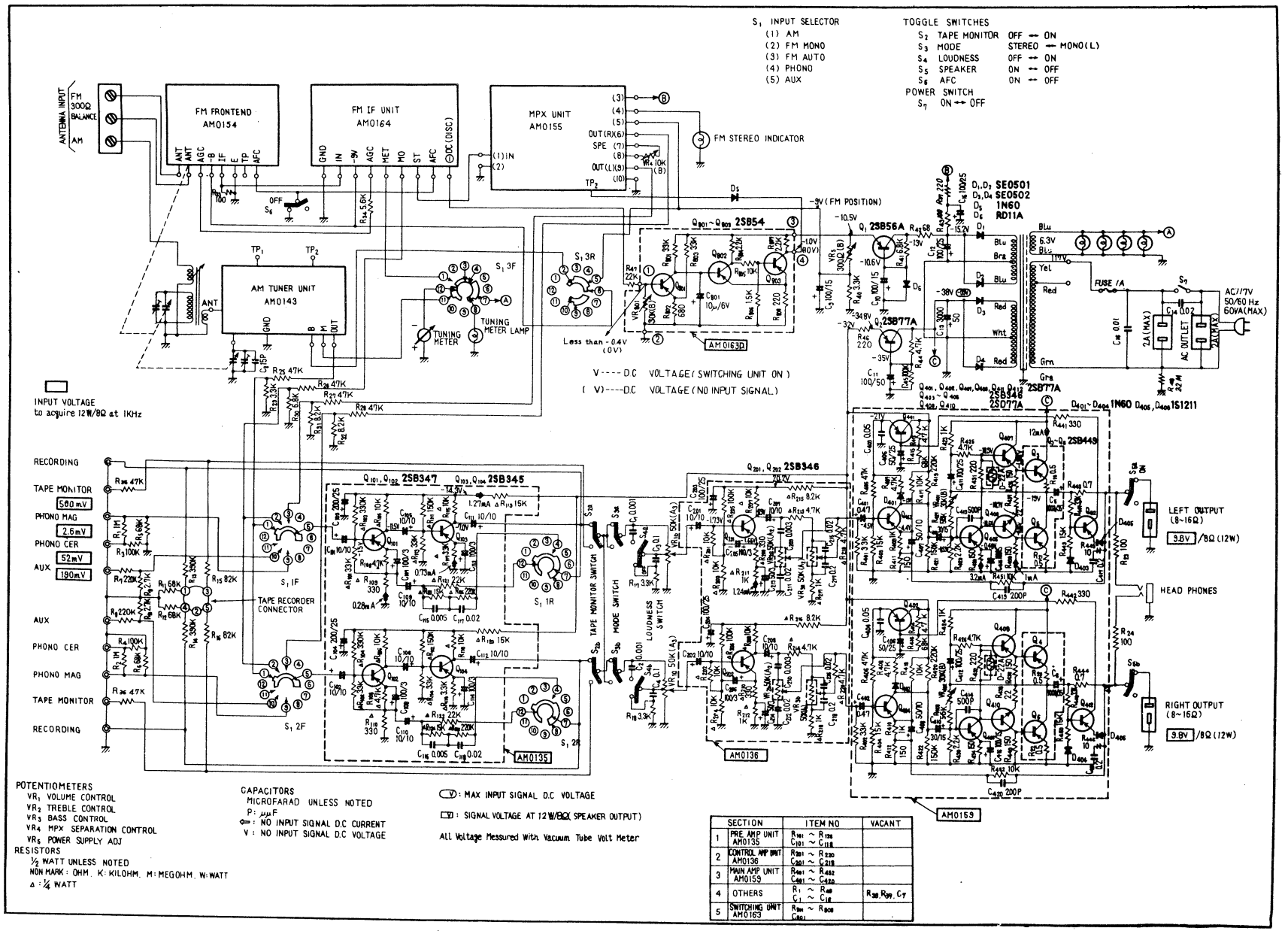
FM FRONTEND AM0127



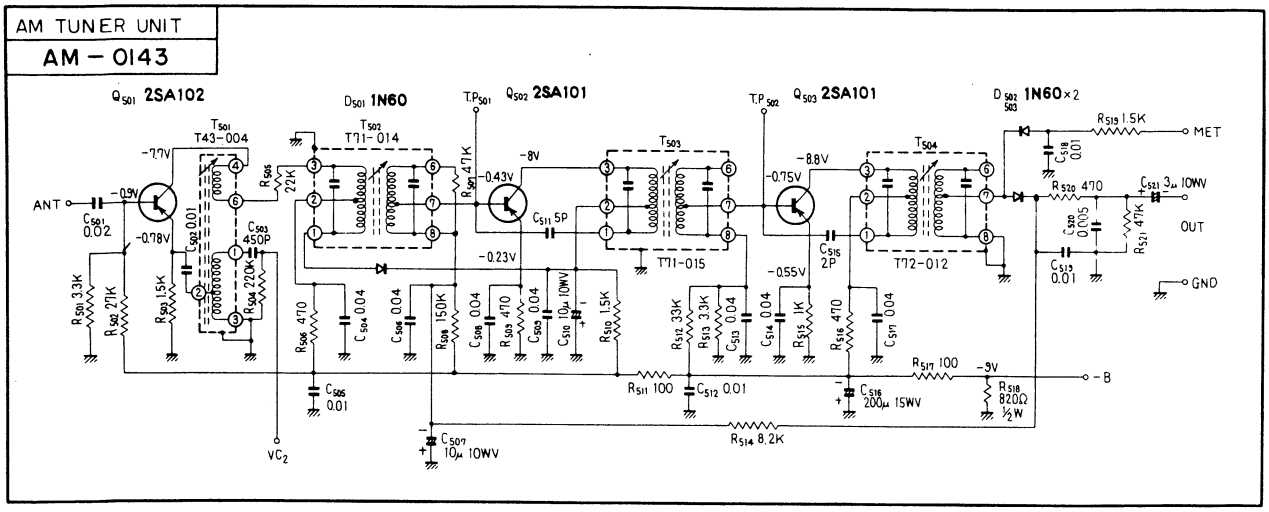
MPX UNIT AM0157



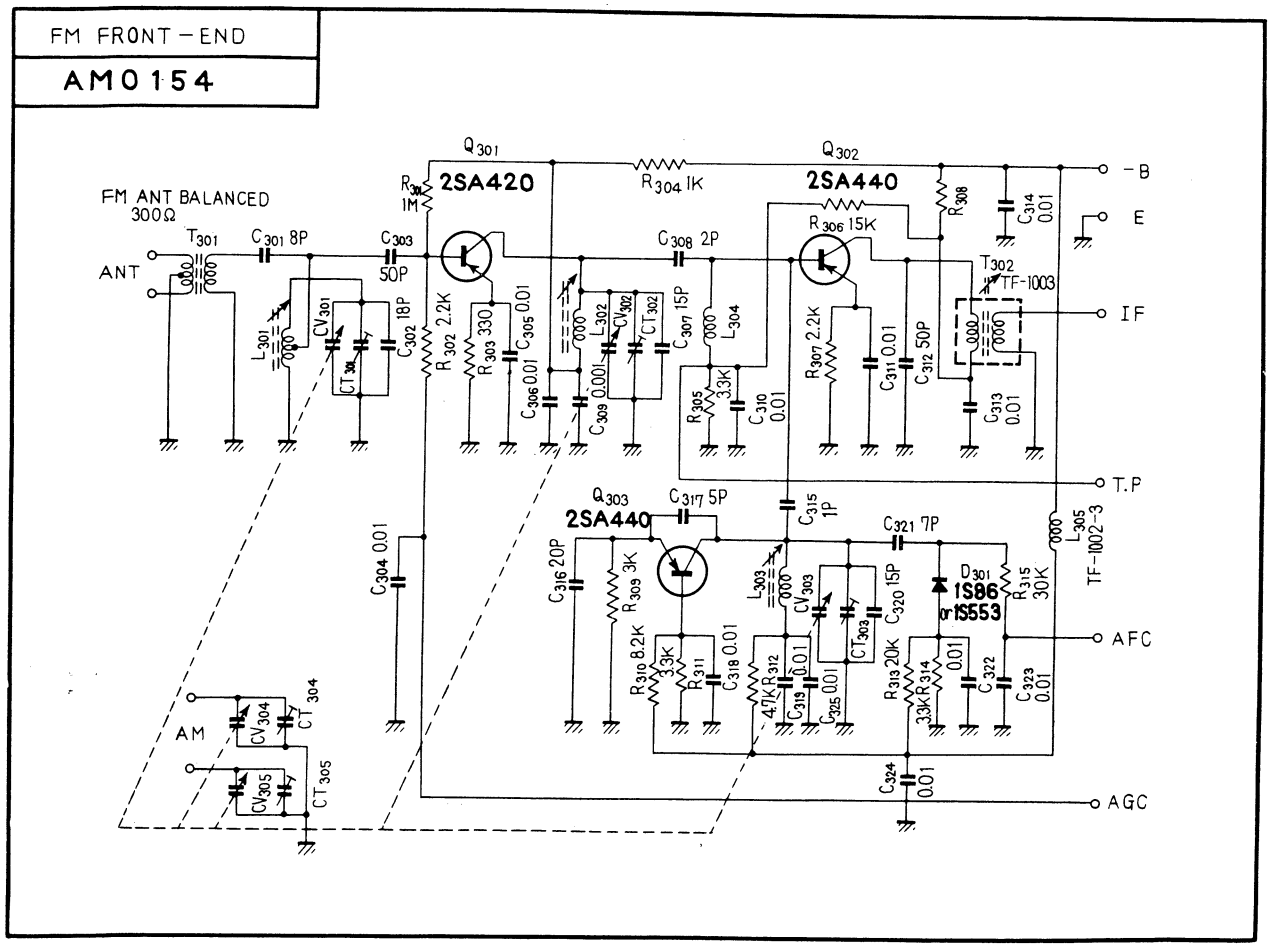
Model SX-300T


S1 INPUT SELECTOR
(1) AM
(2) FM MONO
(3) FM AUTO
(4) PHONO
(5) AUX
TOGGLE SWITCHES
S2 TAPE MONITOR OFF → ON
S3 MODE STEREO → MONO(L)
S4 LOUDNESS OFF → ON
S5 SPEAKER ON → OFF
S6 AFC ON → OFF
POWER SWITCH
S7 ON → OFF
ANTENNA INPUT
FM 300Ω BALANCE
AM
FM FRONTEND AM0154
FM IF UNIT AM0164
MPX UNIT AM0155
FM STEREO INDICATOR
AM TUNER UNIT AM0143
TUNING METER
TUNING METER LAMP
AM0163D
AM0135
AM0136
AM0159
INPUT VOLTAGE to acquire 12W/8Ω at 1KHz
RECORDING
TAPE MONITOR
PHONO MAG
PHONO CER
AUX
TAPE RECORDER CONNECTOR
TAPE MONITOR SWITCH
MODE SWITCH
LOUDNESS SWITCH
LEFT OUTPUT (8~16Ω)
RIGHT OUTPUT (8~16Ω)
HEAD PHONES
AC//7V 50/60 Hz 60VA(MAX)
AC OUTLET
FUSE /A
V----D.C VOLTAGE(SWITCHING UNIT ON)
(V)----D.C VOLTAGE(NO INPUT SIGNAL)
POTENTIOMETERS
VR1 VOLUME CONTROL
VR2 TREBLE CONTROL
VR3 BASS CONTROL
VR4 MPX SEPARATION CONTROL
VR5 POWER SUPPLY ADJ
RESISTORS
½ WATT UNLESS NOTED
NON MARK : OHM, K: KILOHM, M: MEGOHM, W: WATT
Δ : ¼ WATT
CAPACITORS
MICROFARAD UNLESS NOTED
P: μμF
⇦: NO INPUT SIGNAL D.C CURRENT
V : NO INPUT SIGNAL D.C VOLTAGE
(V): MAX INPUT SIGNAL D.C VOLTAGE
[V]: SIGNAL VOLTAGE AT 12W/8Ω SPEAKER OUTPUT)
All Voltage Measured With Vacuum Tube Volt Meter
SECTION | ITEM NO | VACANT
1 PRE AMP UNIT AM0135 | R101 ~ R126, C101 ~ C118 |
2 CONTROL AMP UNIT AM0136 | R201 ~ R230, C201 ~ C218 |
3 MAIN AMP UNIT AM0159 | R401 ~ R452, C401 ~ C420 |
4 OTHERS | R1 ~ R48, C1 ~ C18 | R38, R99, C7
5 SWITCHING UNIT AM0163 | R801 ~ R808, C801 |

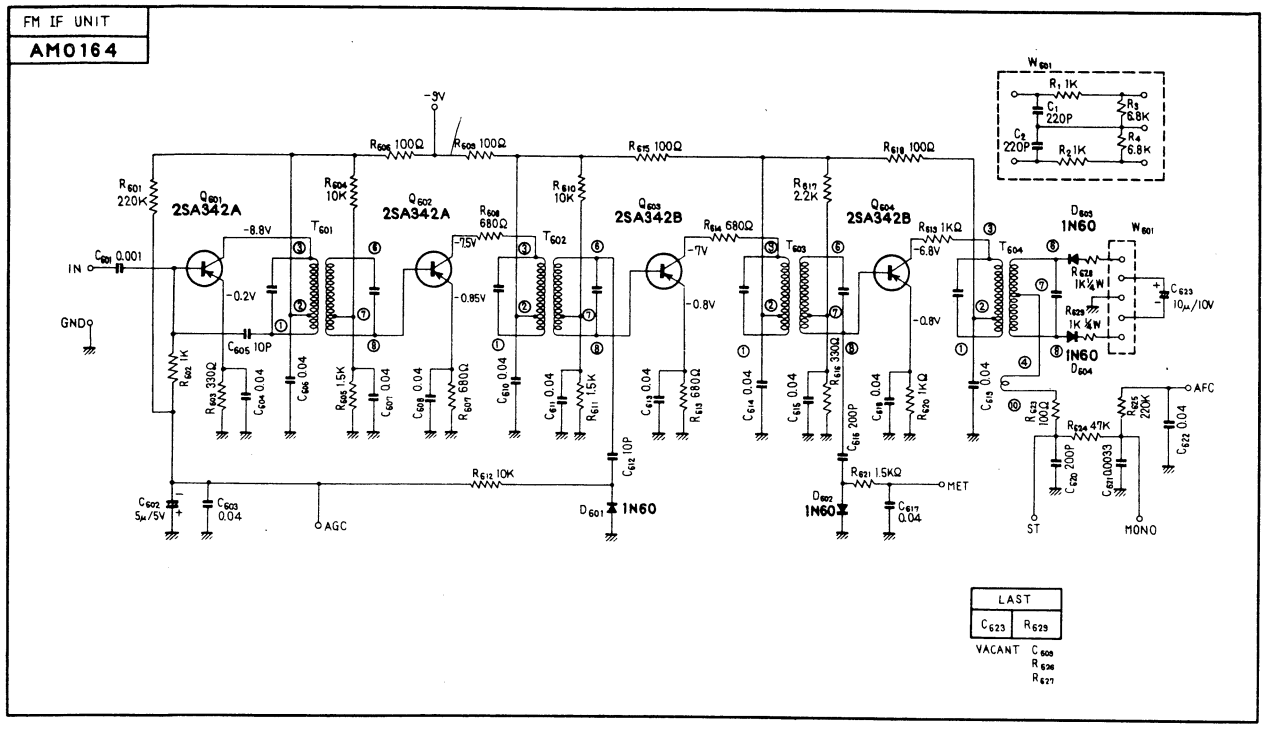
AM TUNER UNIT AM0143



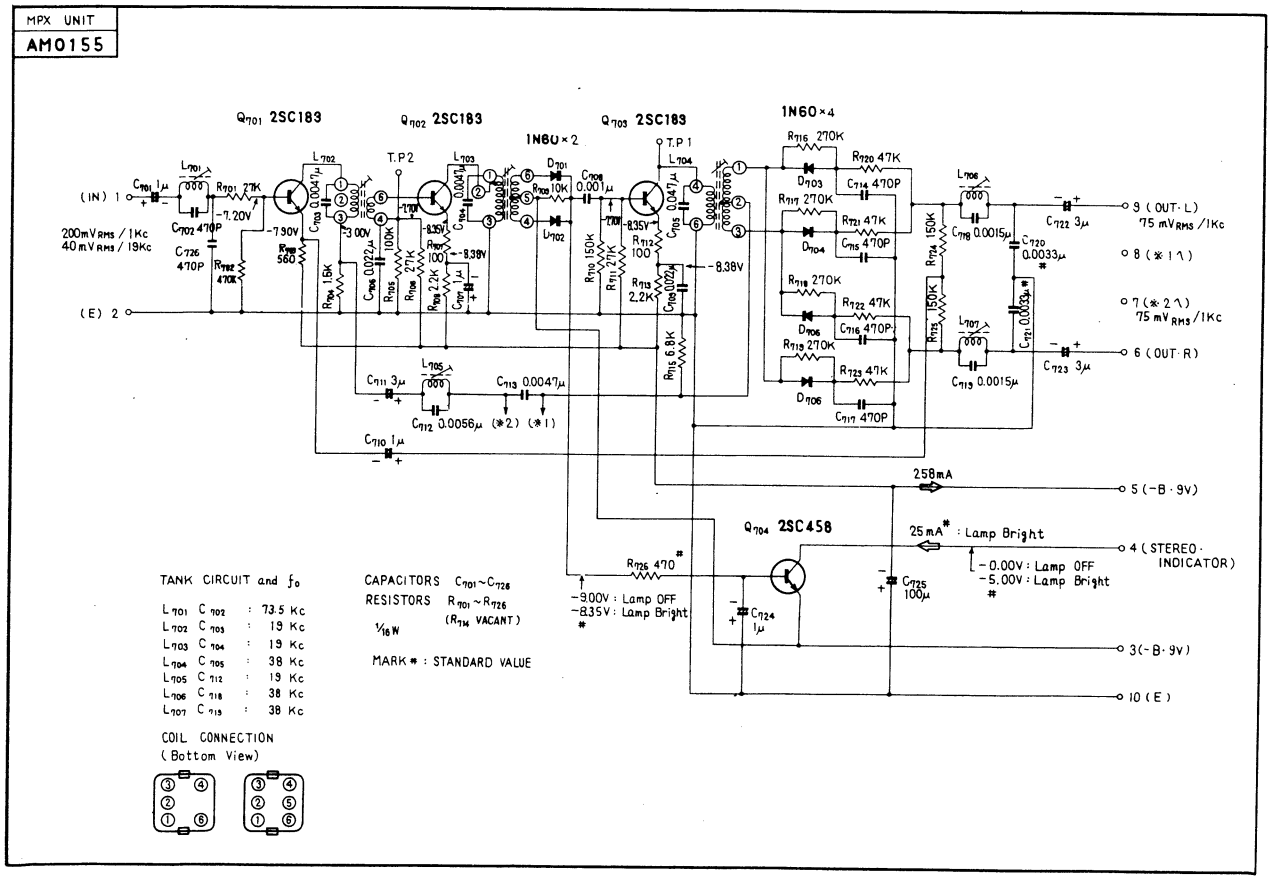
FM FRONTEND AM0154



FM IF UNIT AM0164

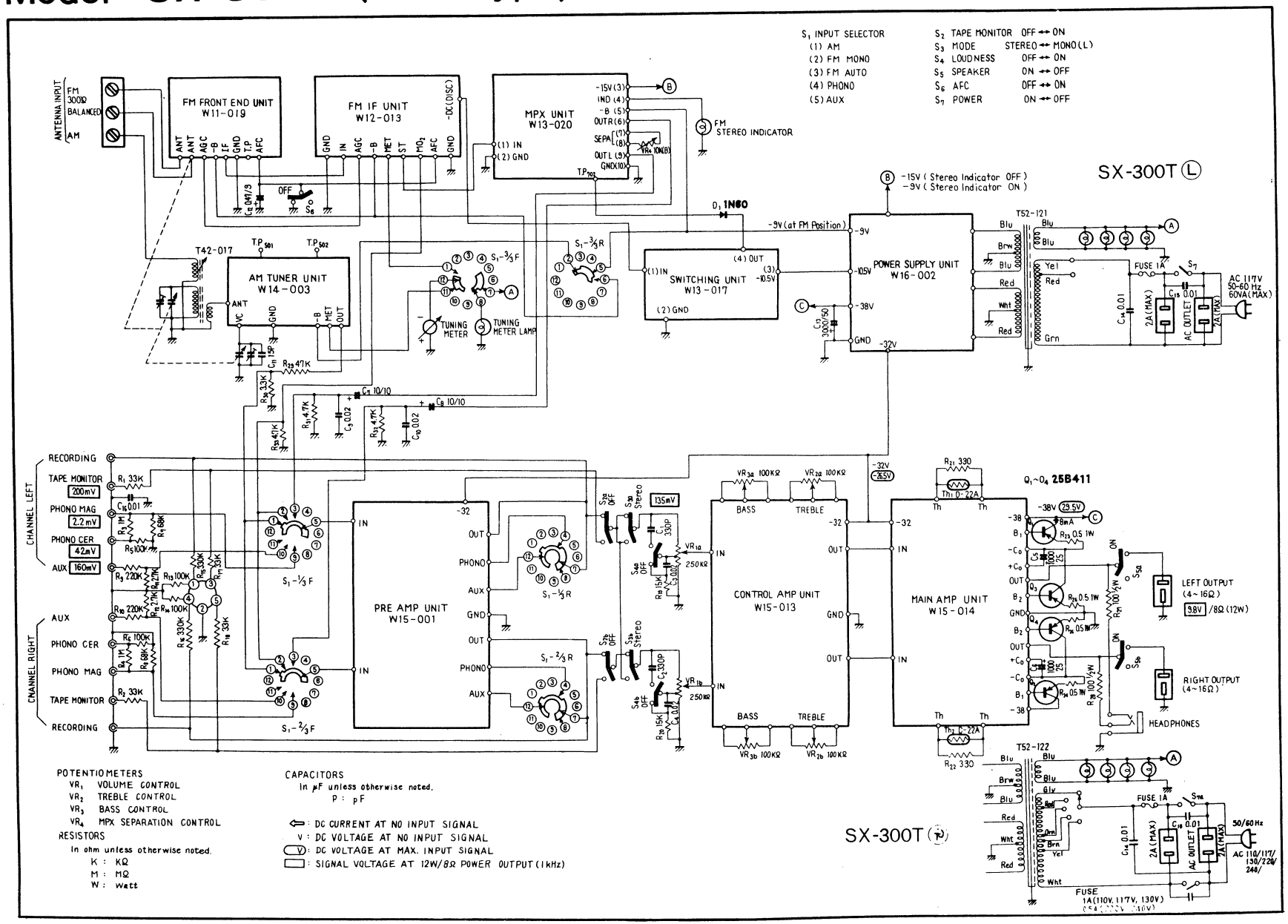


MPX UNIT AM0155

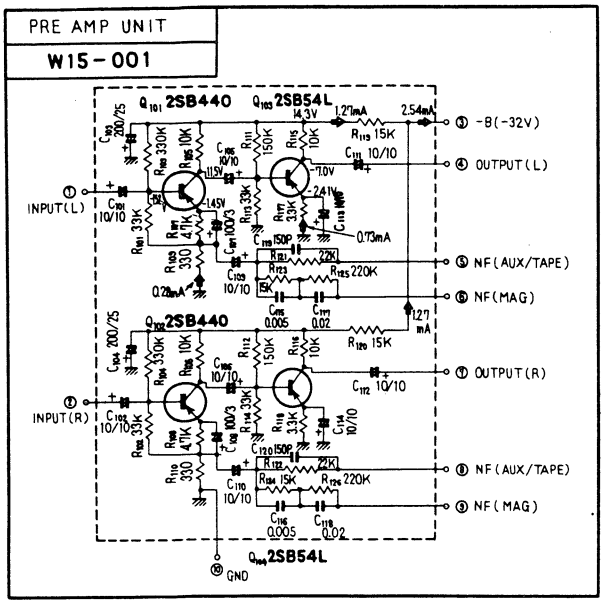


18

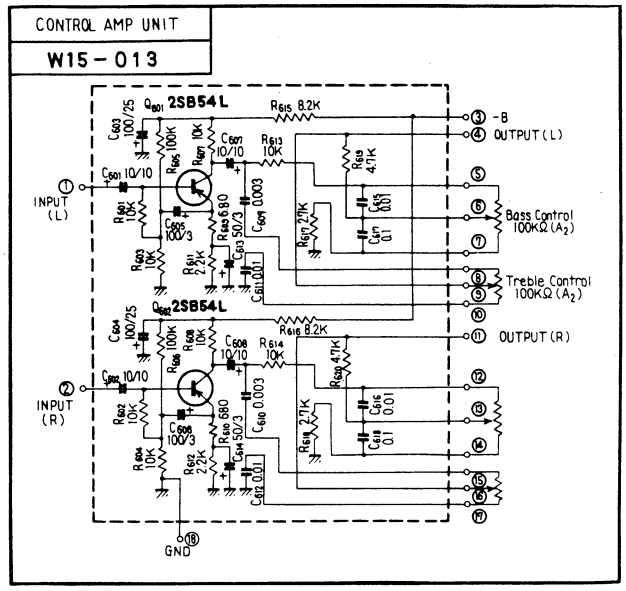
Model SX-300T (New type)



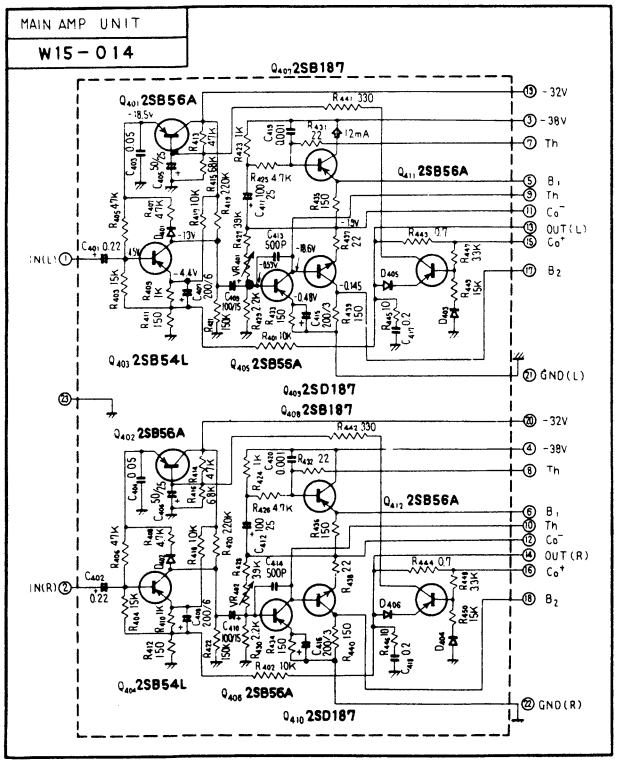
PRE AMP UNIT W15-001



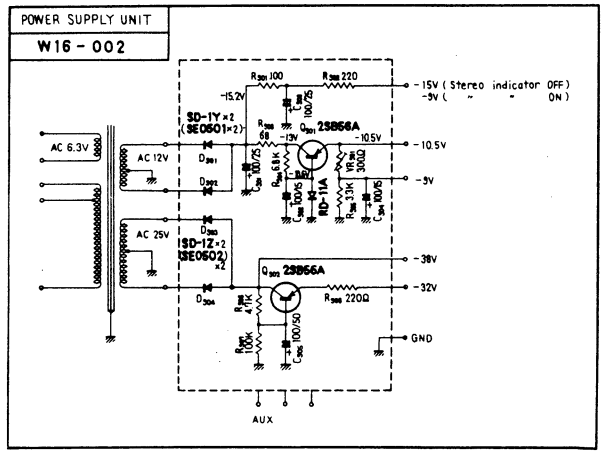
CONTROL AMP UNIT W15-013



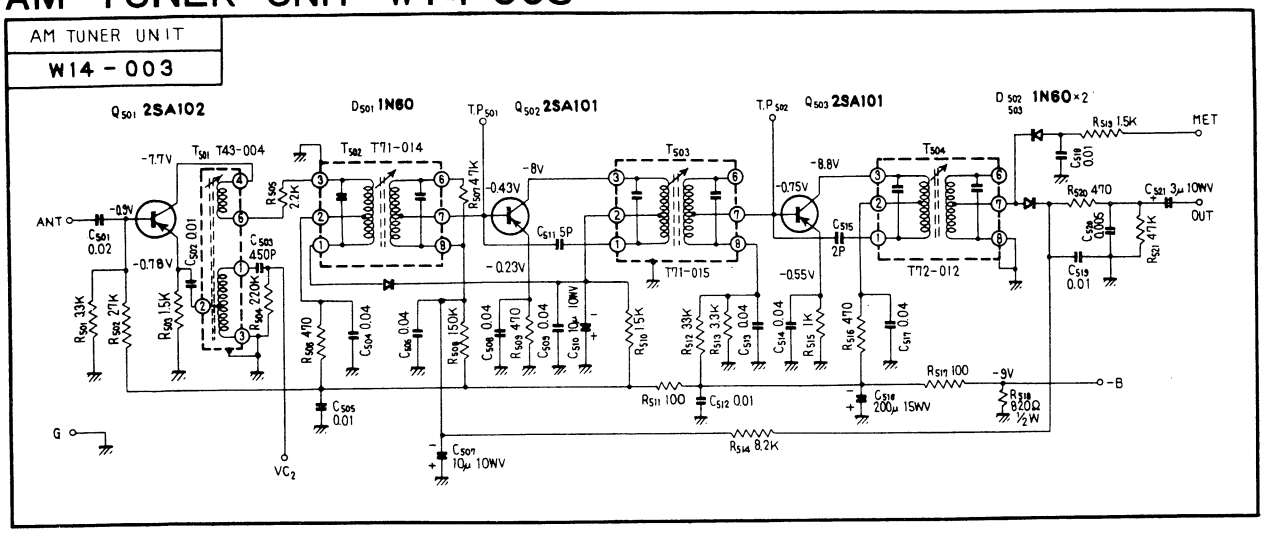
MAIN AMP UNIT W15-014



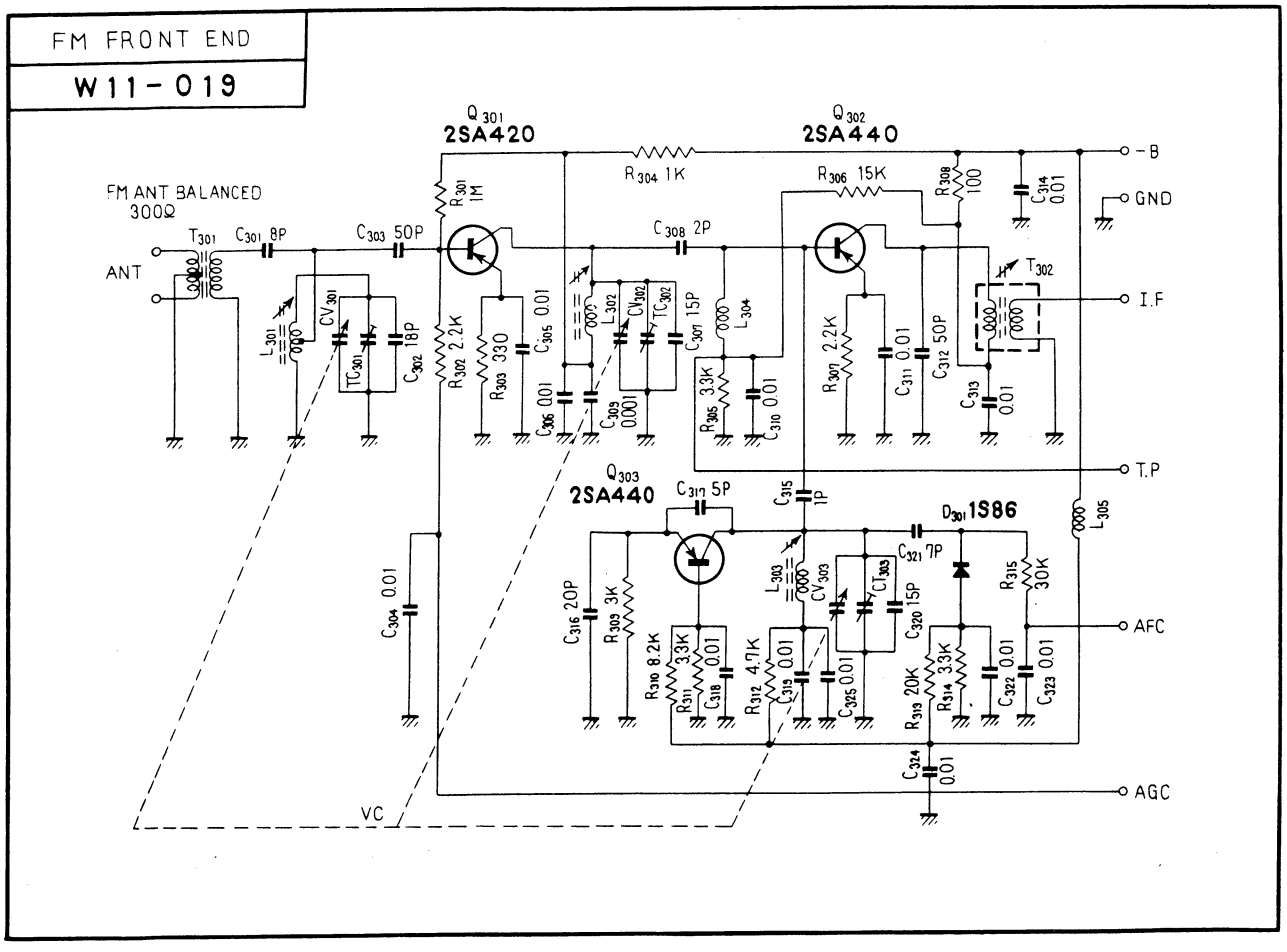
POWER SUPPLY UNIT W16-002



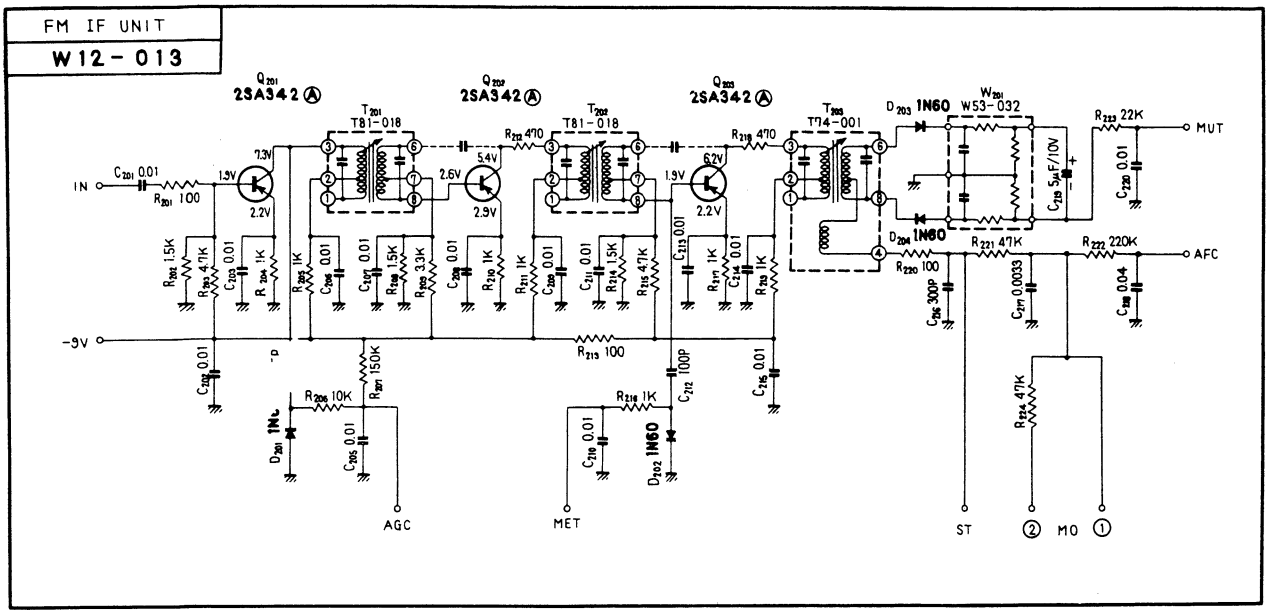
AM TUNER UNIT W14-003



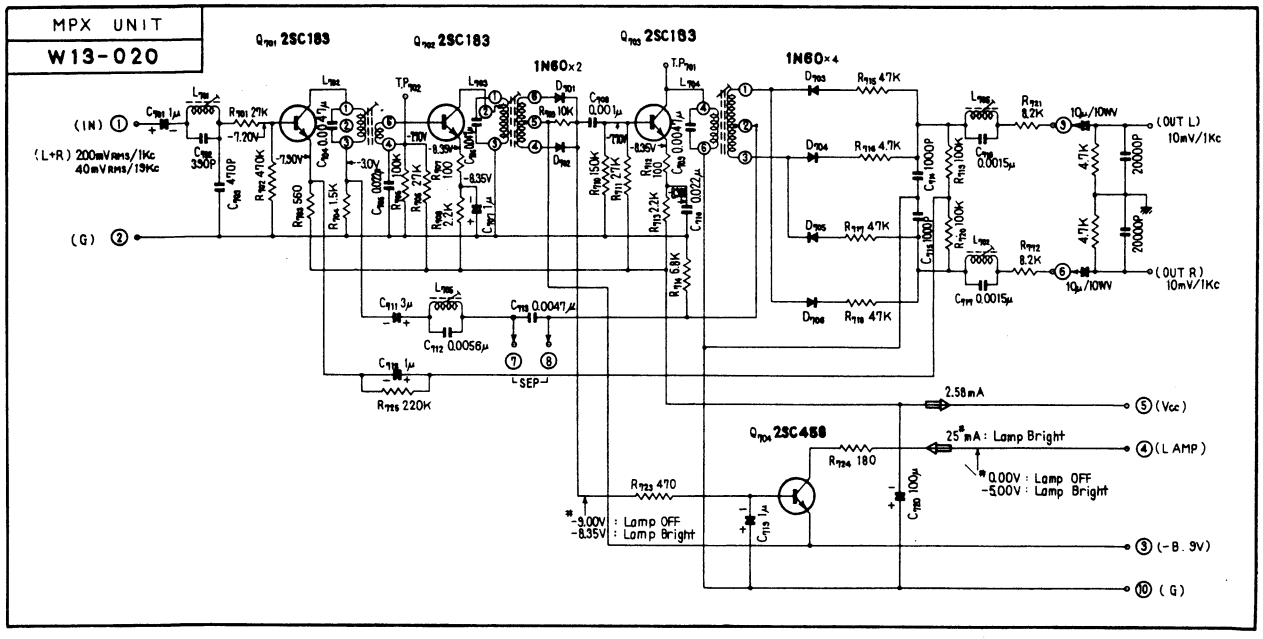
FM FRONTEND W11-019



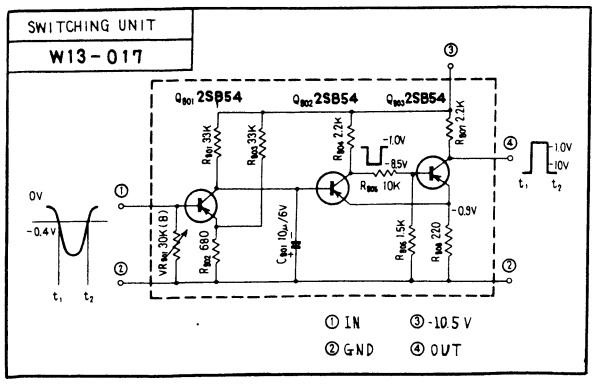
FM IF UNIT W12-013



MPX UNIT W13-020

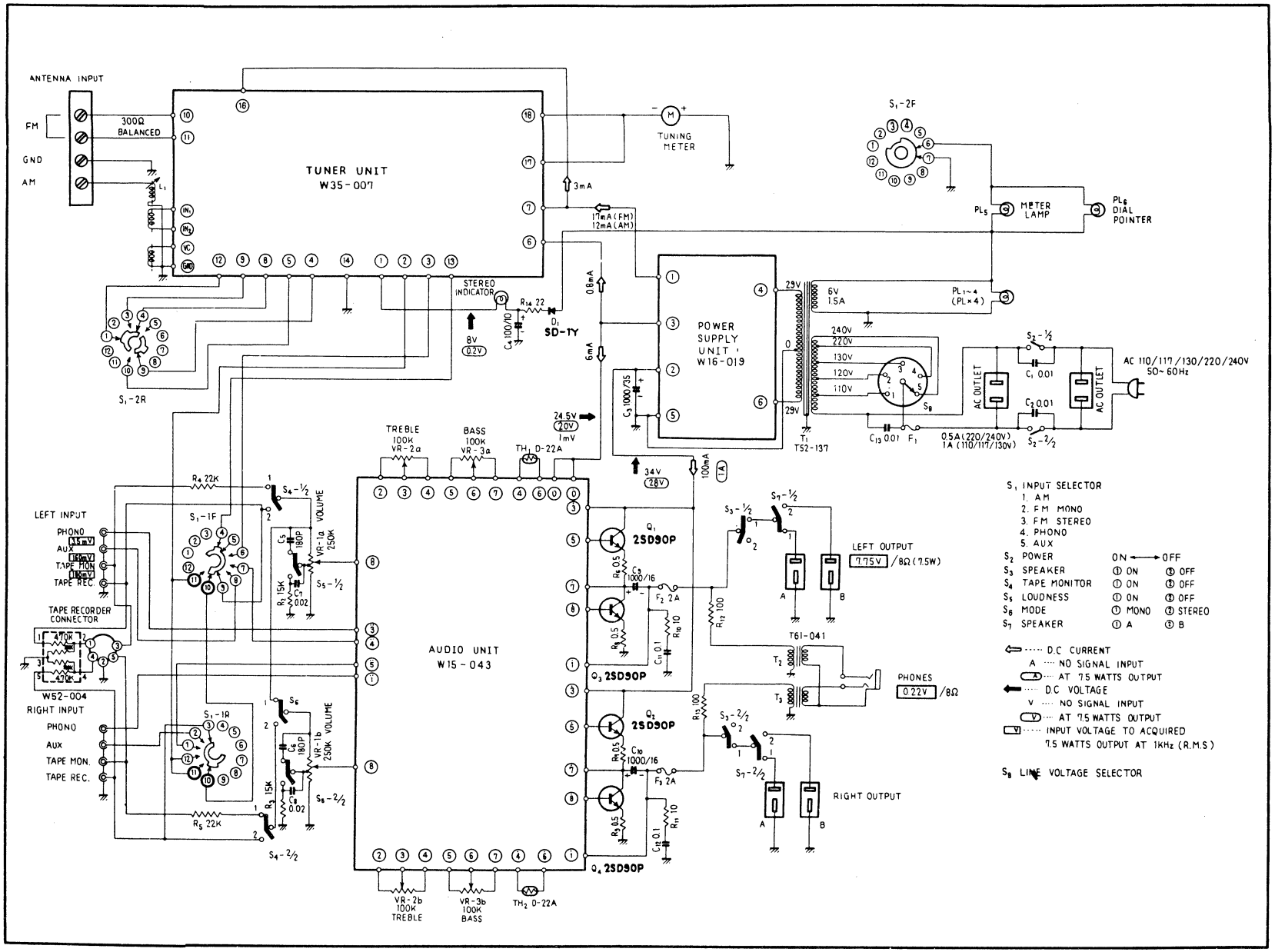


SWITCHING UNIT W13-017



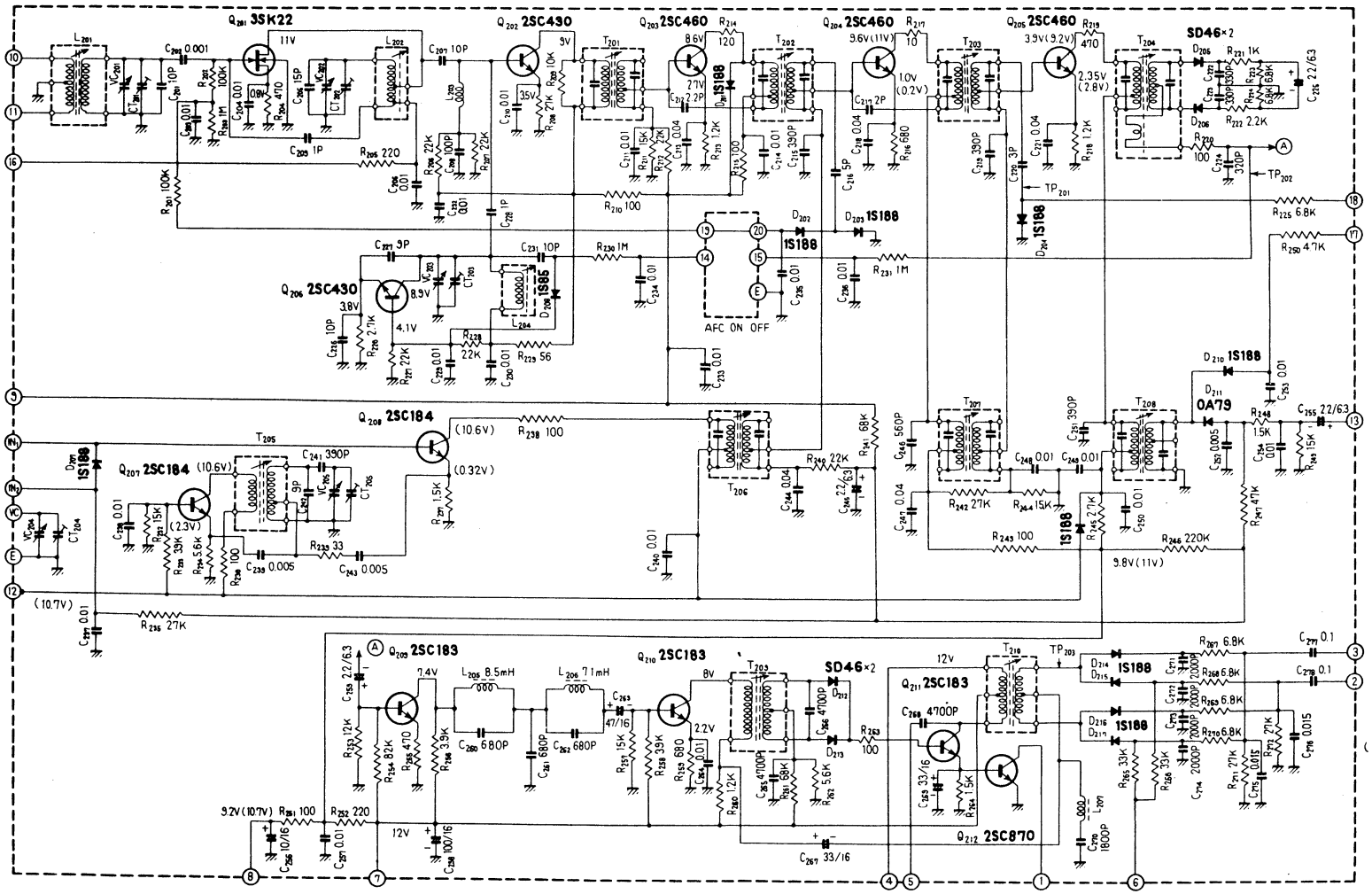
16

Model SX-440/F



TUNER UNIT W35-007

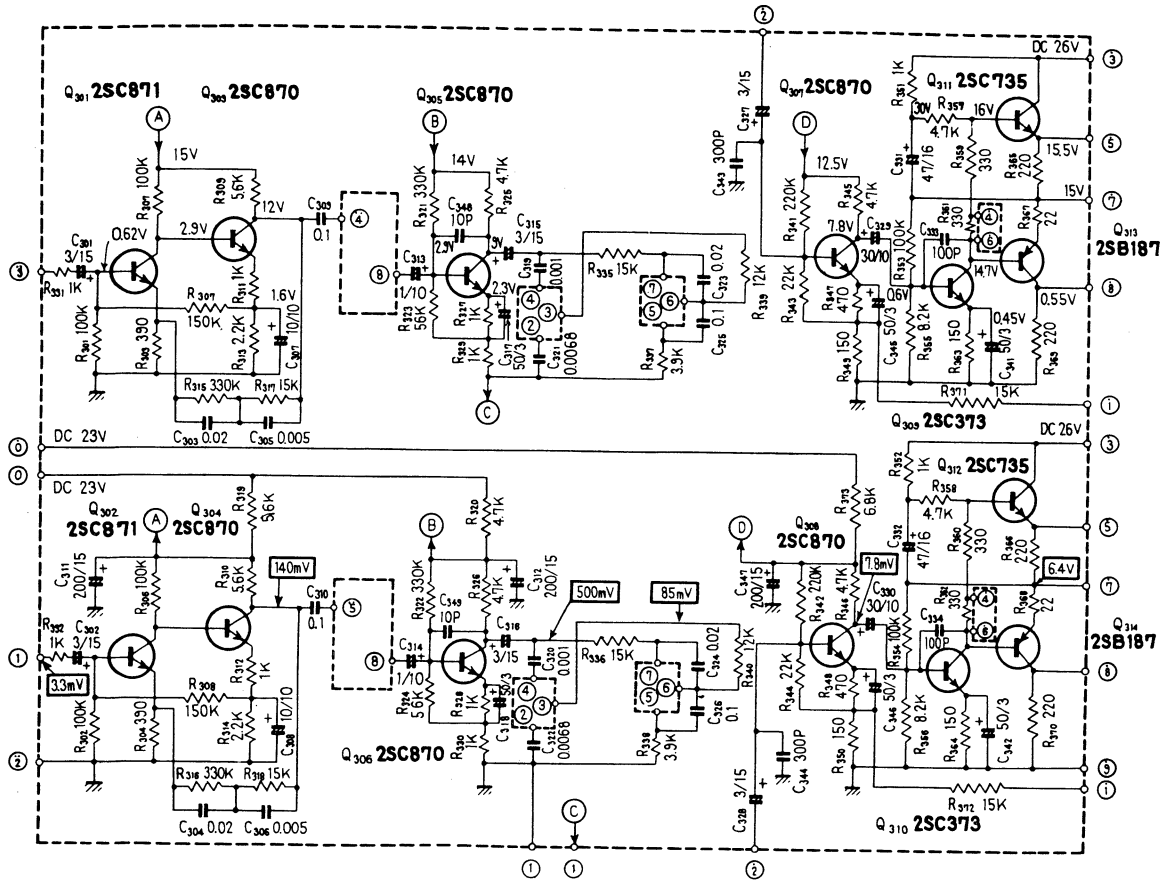
TUNER UNIT
W35-007



23
23

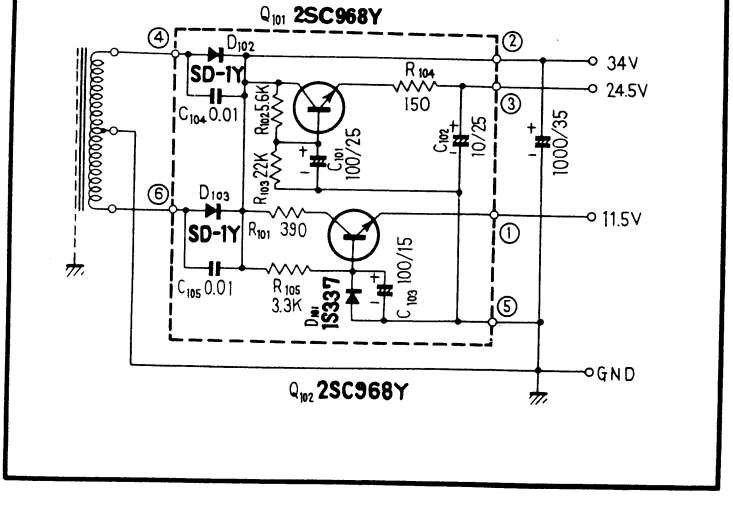
AUDIO UNIT W15-043

AUDIO UNIT
W15-043



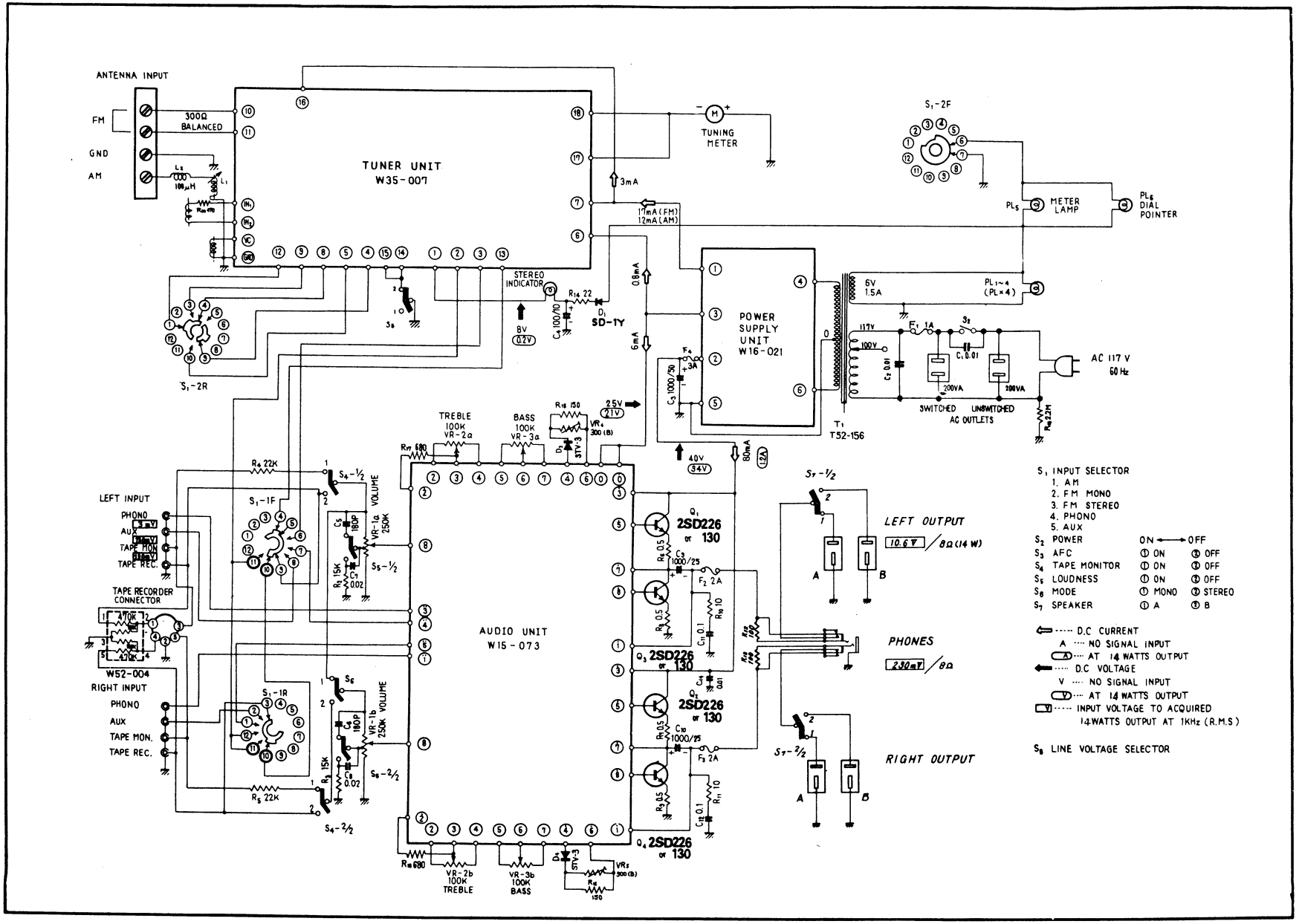
POWER SUPPLY UNIT W16-019

POWER SUPPLY UNIT
W16-019



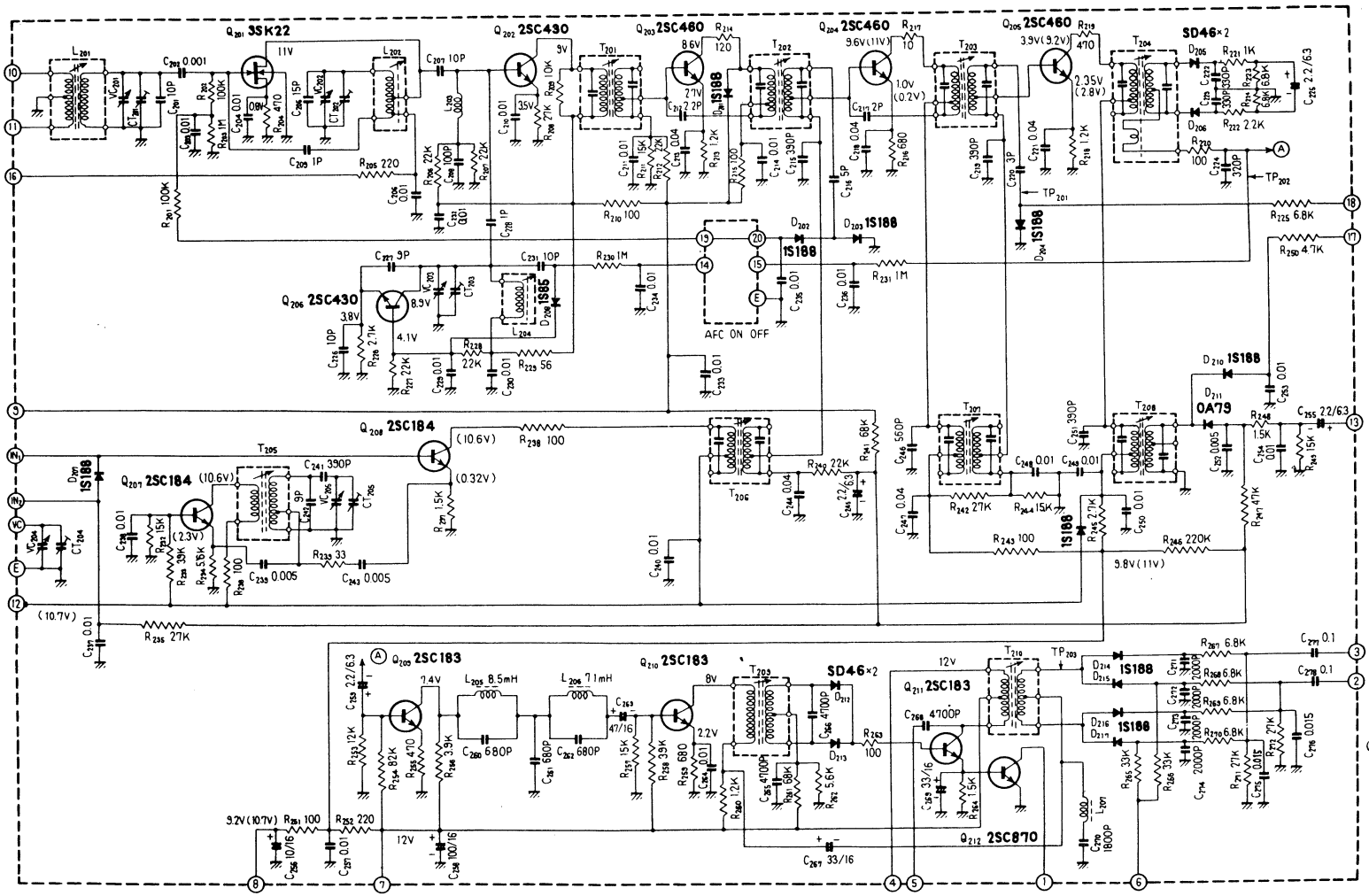
24

Model SX-440/KC/FVW



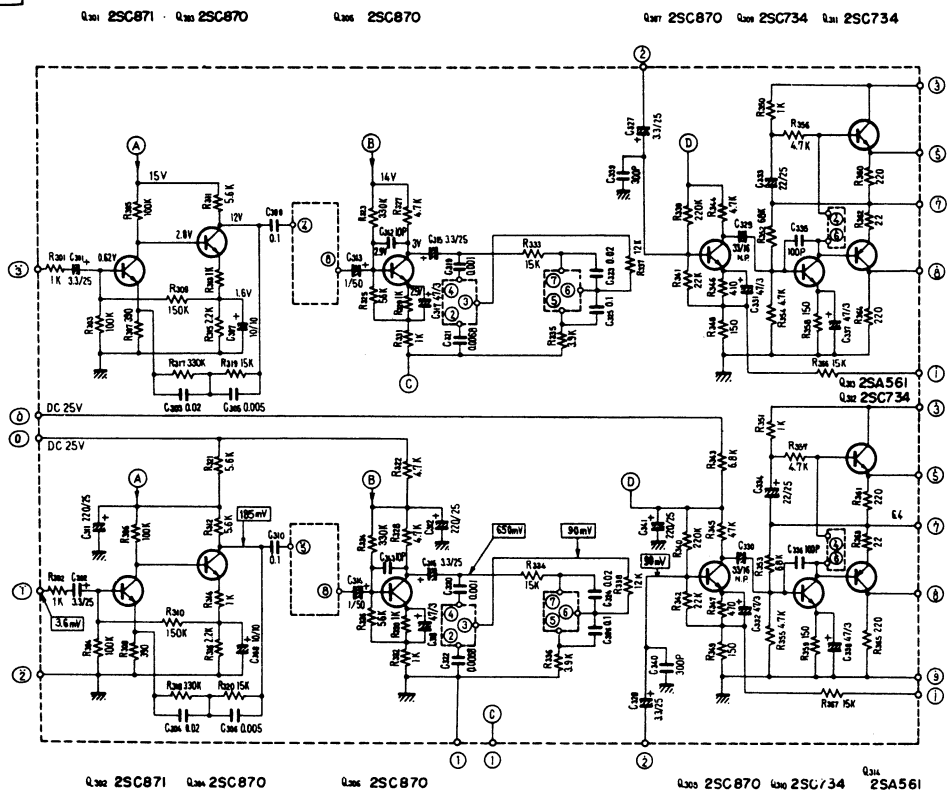
TUNER UNIT W35-007

TUNER UNIT
W35-007



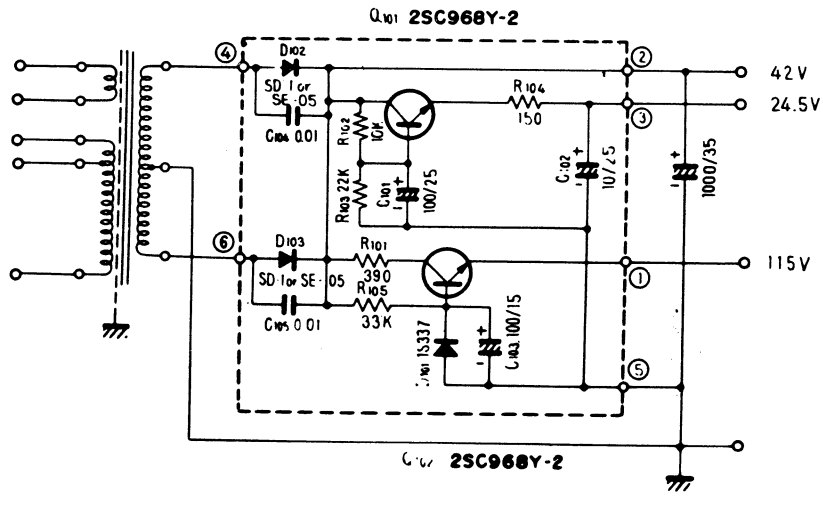
AUDIO UNIT W15-073

AUDIO UNIT
W15-073



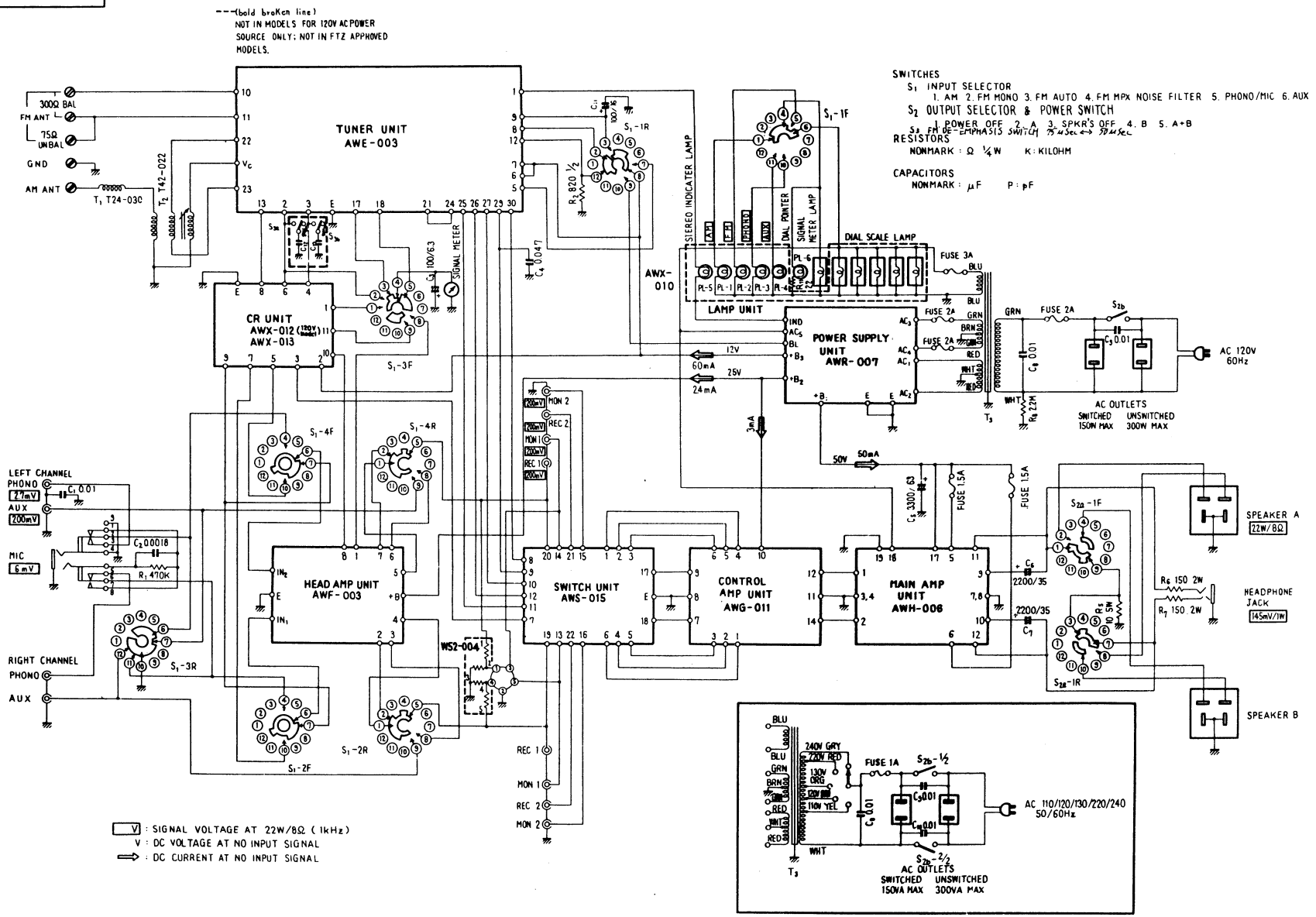
POWER SUPPLY UNIT W16-021

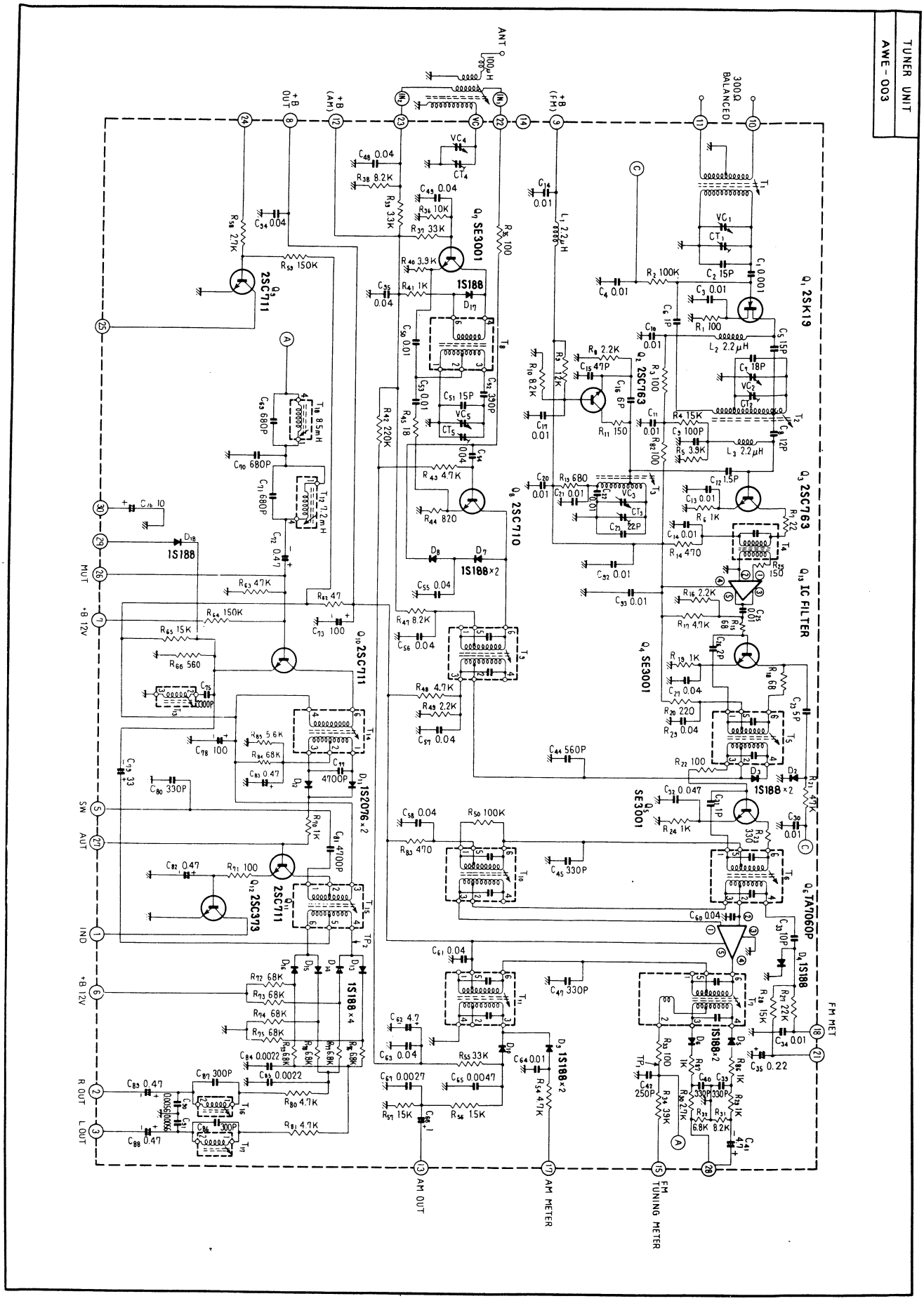
POWER SUPPLY UNIT
W16 - 021



27

SX-525


---(bold broKen line)
NOT IN MODELS FOR 120V AC POWER SOURCE ONLY; NOT IN FTZ APPROVED MODELS.
SWITCHES
S1 INPUT SELECTOR
1. AM 2. FM MONO 3. FM AUTO 4. FM MPX NOISE FILTER 5. PHONO/MIC 6. AUX
S2 OUTPUT SELECTOR & POWER SWITCH
1. POWER OFF 2. A 3. SPKR'S OFF 4. B 5. A+B
S3 FM DE-EMPHASIS SWITCH 75 μSec ⇔ 50 μSec
RESISTORS
NONMARK : Ω 1/4W K: KILOHM
CAPACITORS
NONMARK : μF P : pF
TUNER UNIT AWE-003
CR UNIT AWX-012 (120V model) AWX-013
AWX-010
LAMP UNIT
DIAL SCALE LAMP
POWER SUPPLY UNIT AWR-007
HEAD AMP UNIT AWF-003
SWITCH UNIT AWS-015
CONTROL AMP UNIT AWG-011
MAIN AMP UNIT AWH-006
300Ω BAL
FM ANT
75Ω UNBAL
GND
AM ANT
LEFT CHANNEL
PHONO 2.7mV
AUX 200mV
MIC 5mV
RIGHT CHANNEL
PHONO
AUX
SPEAKER A 22W/8Ω
SPEAKER B
HEADPHONE JACK 145mV/1W
AC 120V 60Hz
AC 110/120/130/220/240 50/60Hz
AC OUTLETS SWITCHED 150VA MAX UNSWITCHED 300VA MAX
V : SIGNAL VOLTAGE AT 22W/8Ω (1kHz)
V : DC VOLTAGE AT NO INPUT SIGNAL
⇒ : DC CURRENT AT NO INPUT SIGNAL

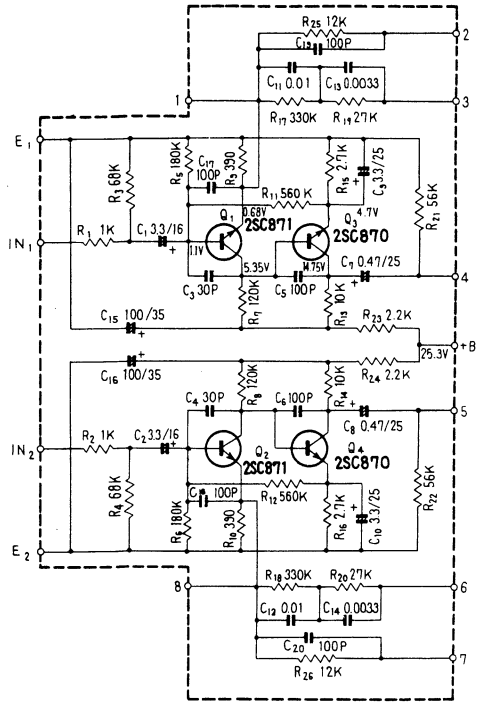


TUNER UNIT

SX-525

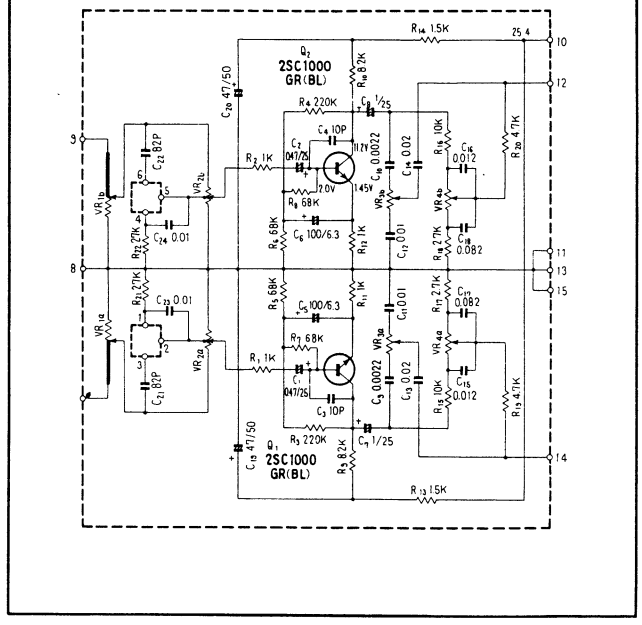
HEAD AMP UNIT

HEAD AMP UNIT
AWF – 003



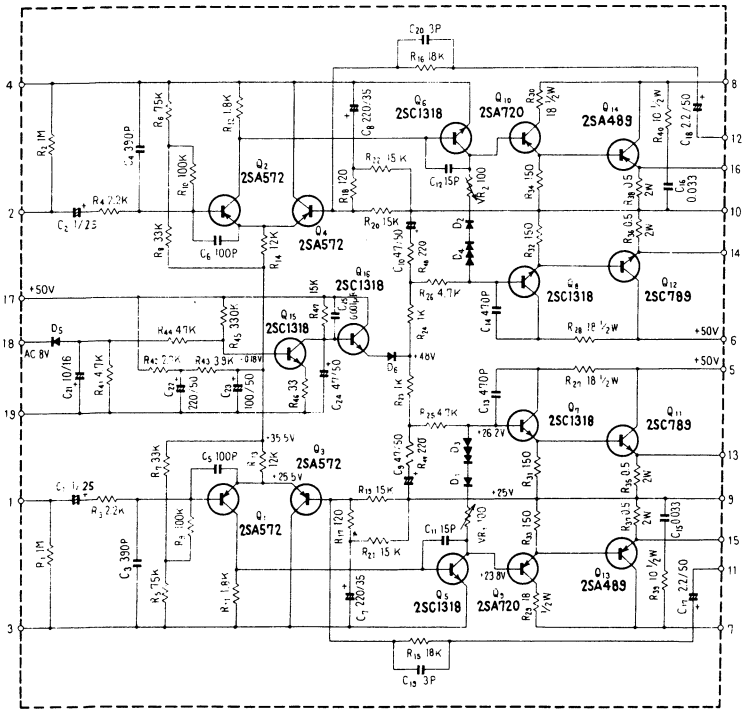
CONTROL AMP UNIT

CONTROL AMP UNIT
AWG – 011



MAIN AMP UNIT

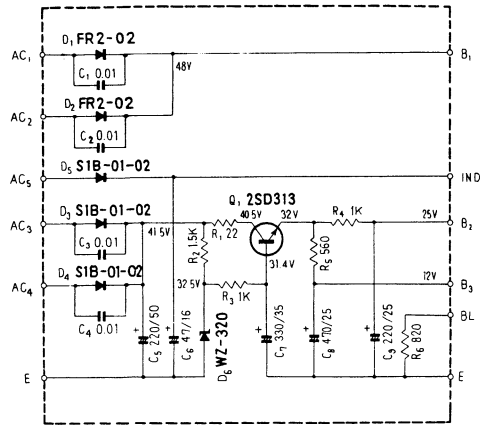
MAIN AMP UNIT
AWH – 006



30

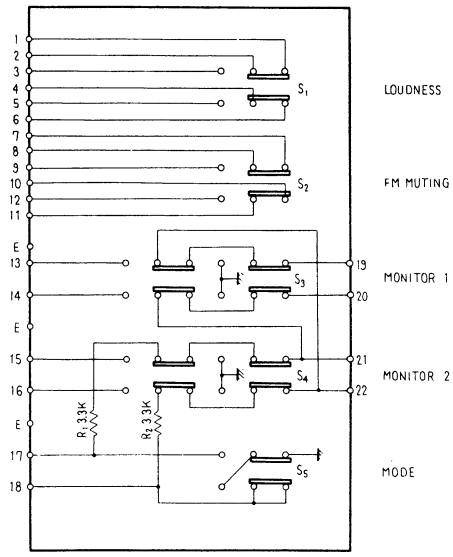
POWER SUPPLY UNIT

POWER SUPPLY UNIT
AWR - 007



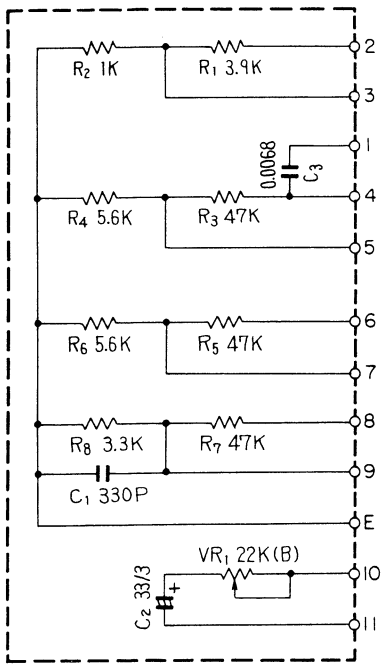
SWITCH UNIT

SWITCH UNIT
AWS - 015



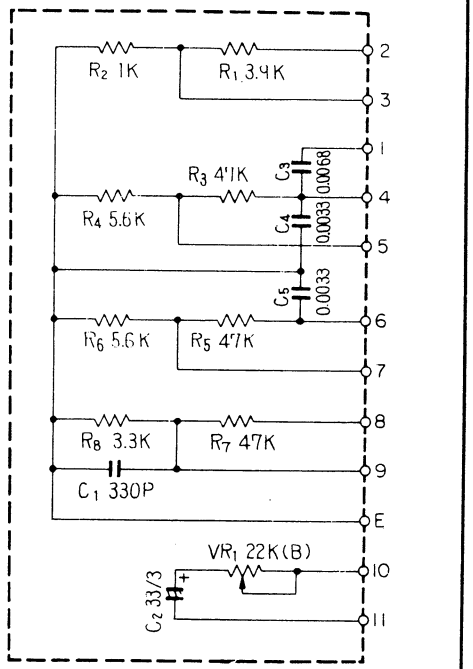
CR UNIT

CR UNIT
AWX-013

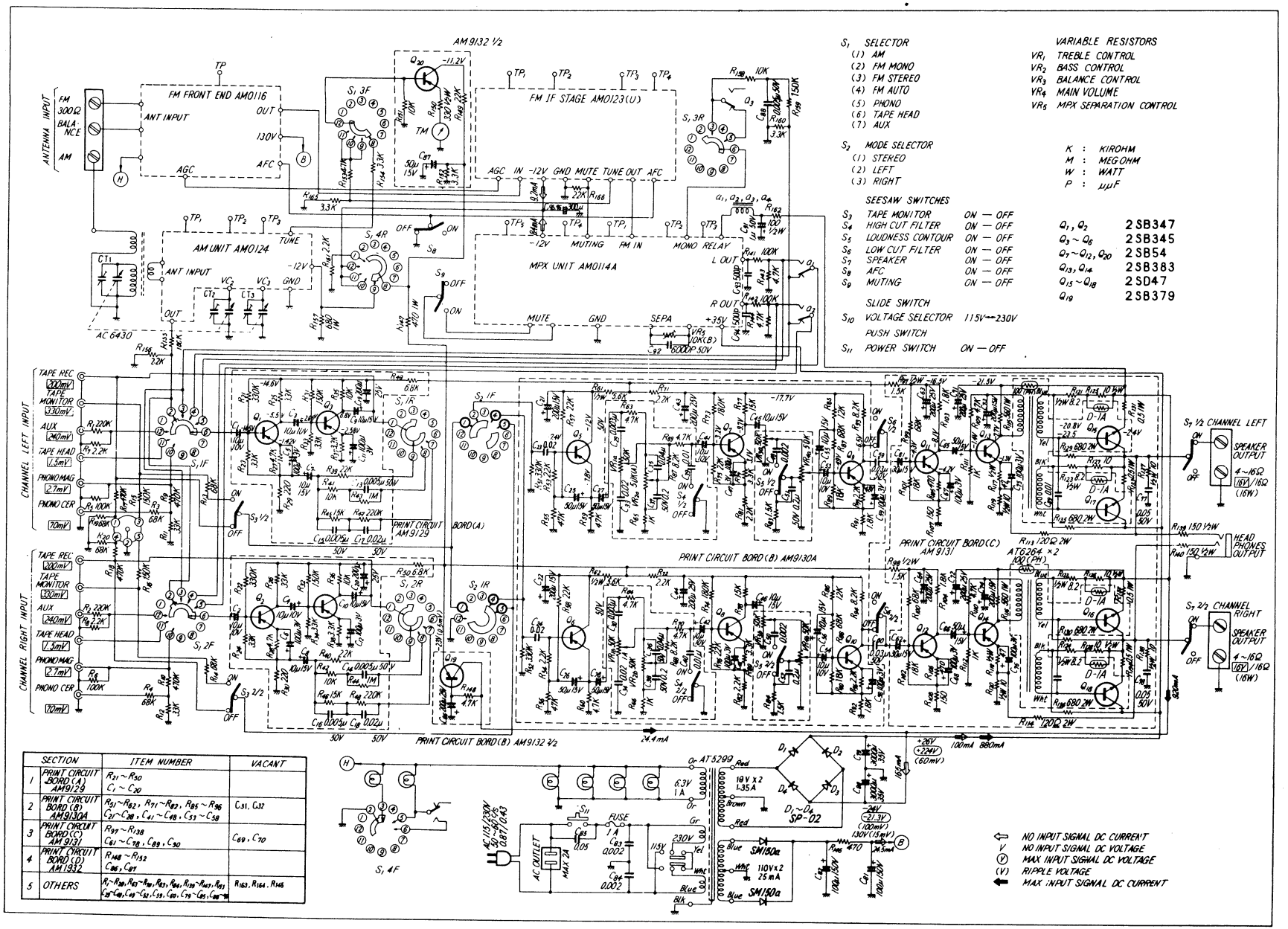


CR UNIT for KW model

CR UNIT
AWX-012



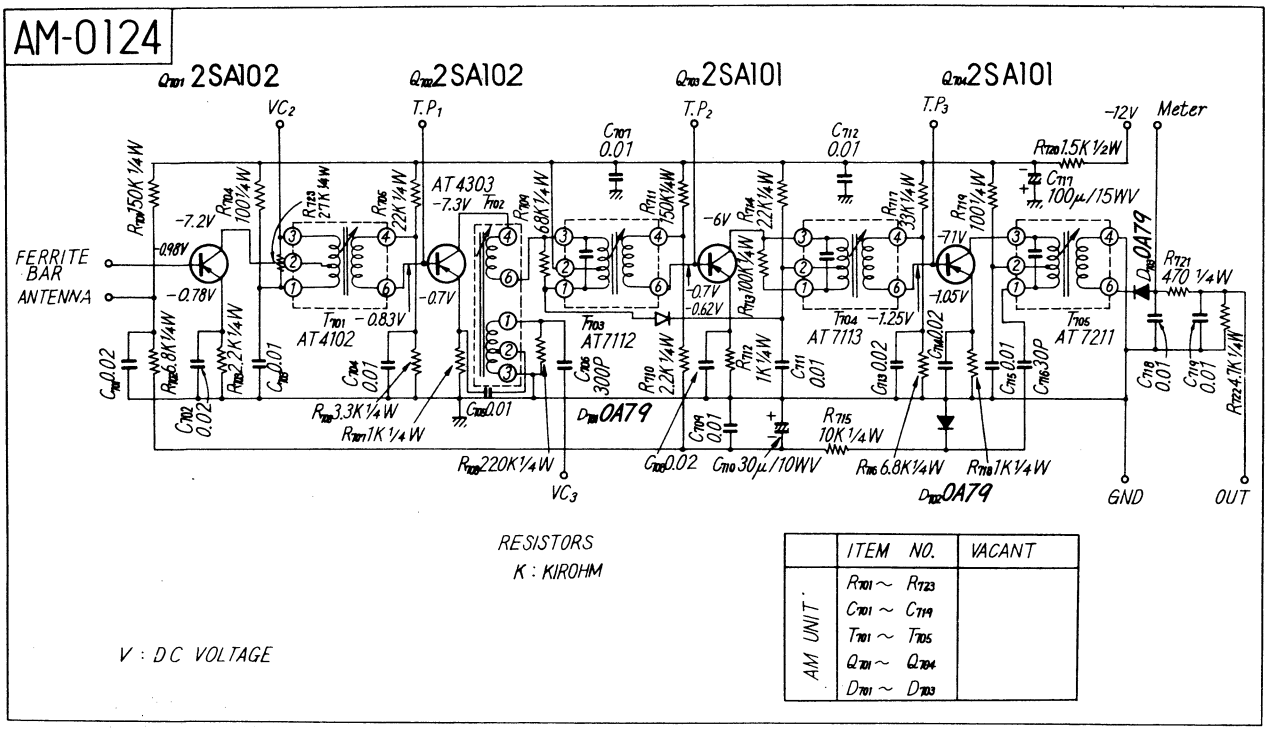
Model SX-600T



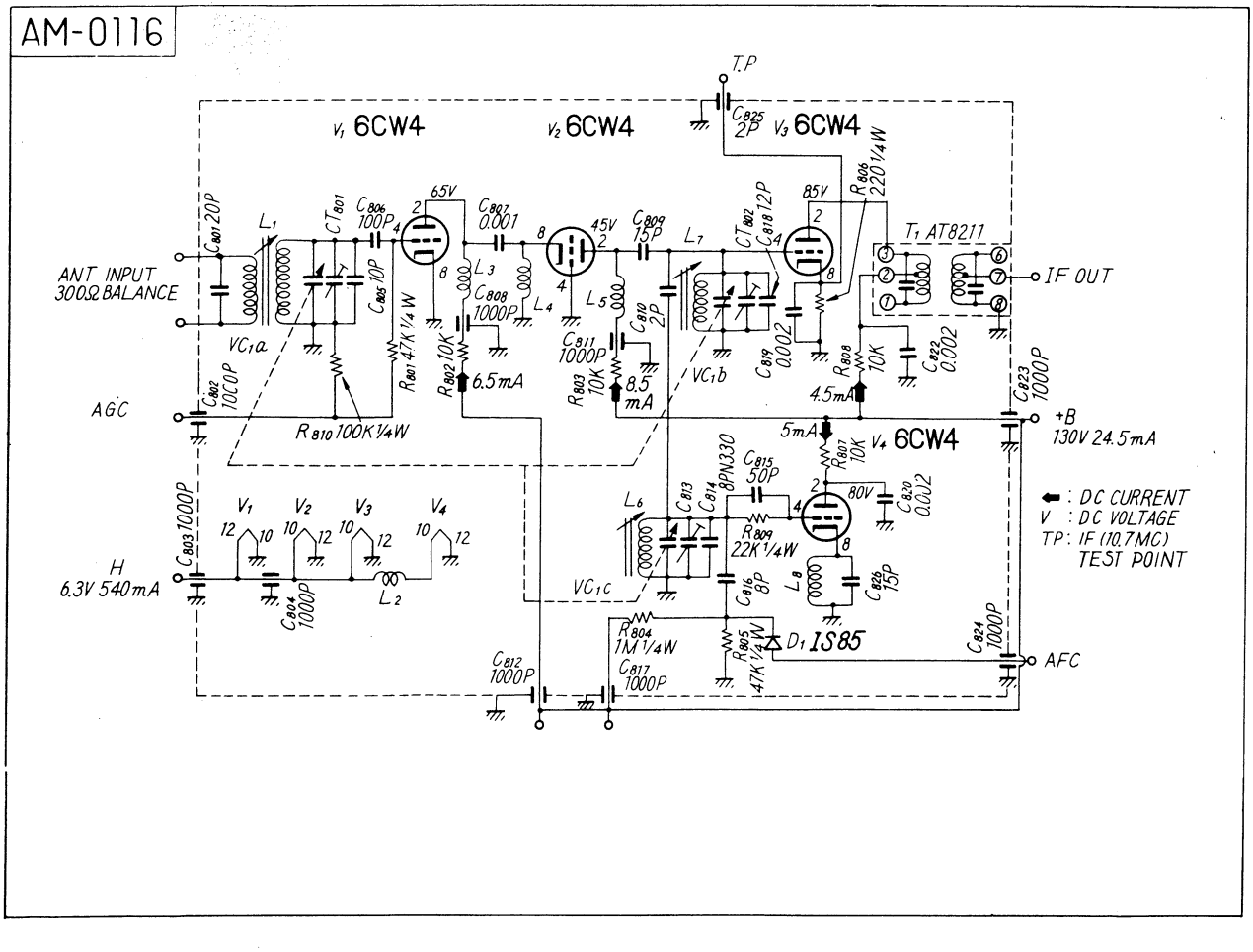
	SECTION	ITEM NUMBER	VACANT
1	PRINT CIRCUIT BORD (A) AM9129	$R_{31} \sim R_{50}$ $C_1 \sim C_{30}$	
2	PRINT CIRCUIT BORD (B) AM9130A	$R_{51} \sim R_{82}$, $R_{71} \sim R_{82}$, $R_{85} \sim R_{96}$ $C_{31} \sim C_{38}$, $C_{41} \sim C_{48}$, $C_{53} \sim C_{58}$	C_{31}, C_{32}
3	PRINT CIRCUIT BORD (C) AM 9131	$R_{97} \sim R_{138}$ $C_{61} \sim C_{78}$, C_{89}, C_{90}	C_{69}, C_{70}
4	PRINT CIRCUIT BORD (D) AM 1932	$R_{148} \sim R_{152}$ C_{86}, C_{87}	
5	OTHERS	$R_1 \sim R_{30}$, $R_{83} \sim R_{84}$, R_{93}, R_{94}, $R_{139} \sim R_{147}$, R_{153} $C_{31} \sim C_{68}$, $C_{79} \sim C_{85}$, $C_{88} \sim$	R_{153}, R_{154}, R_{155}

32

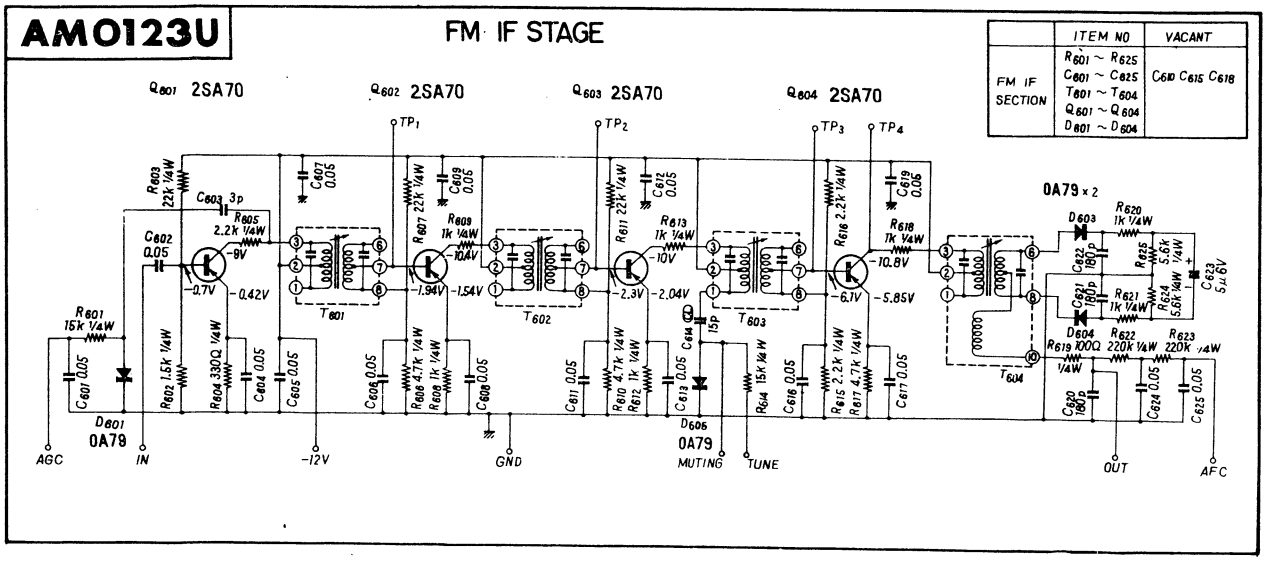
AM TUNER UNIT AM0124



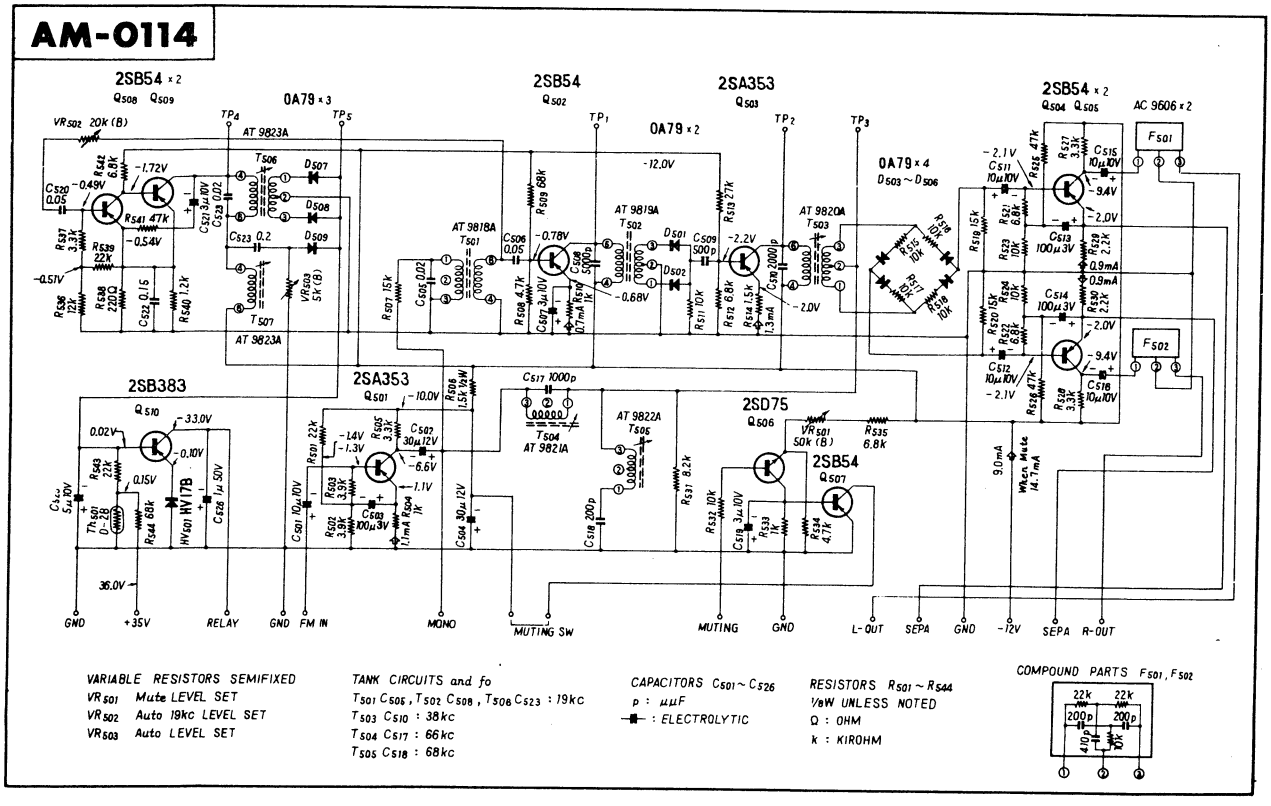
FM FRONTEND AM0116



FM IF UNIT AM0123U

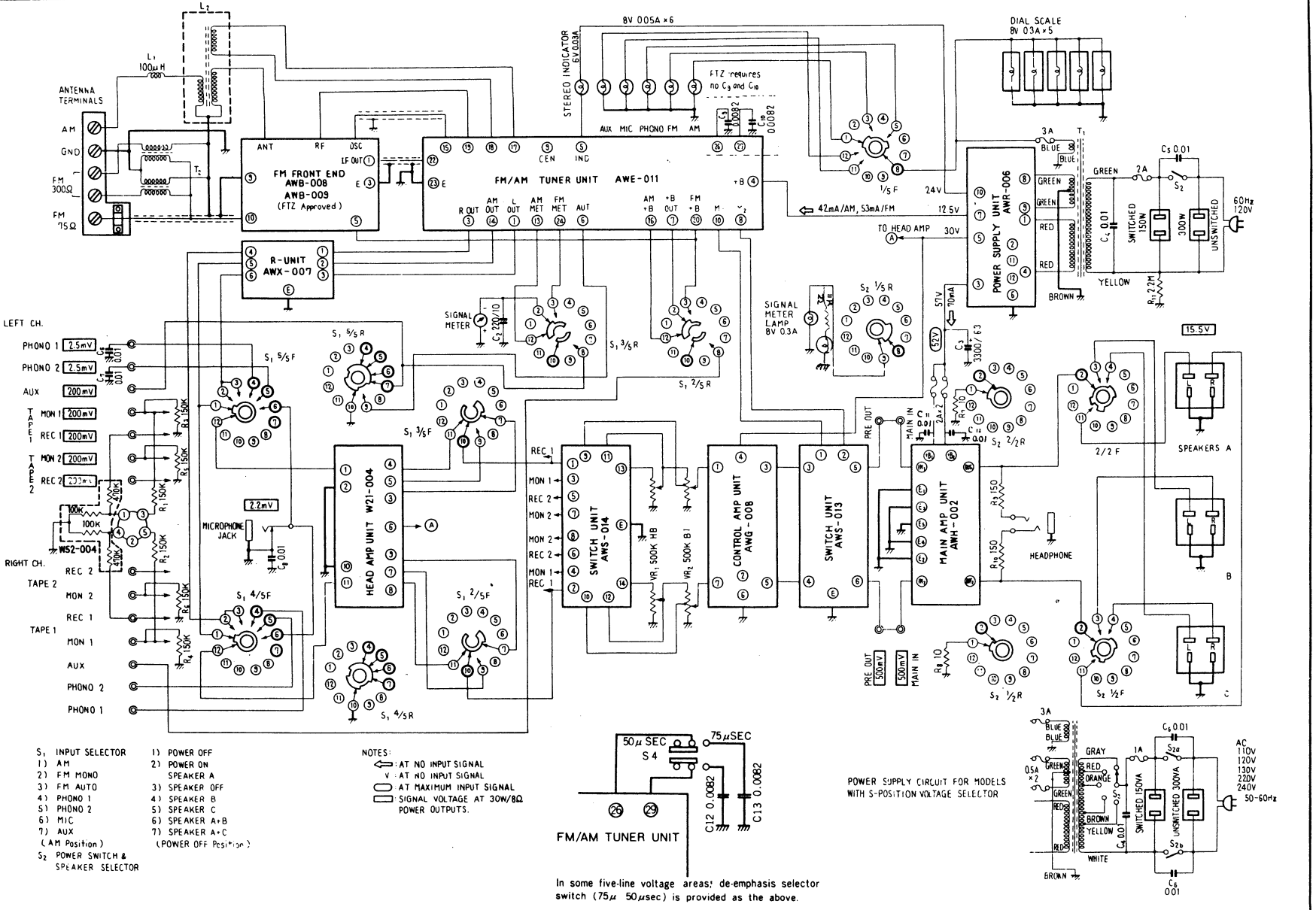


MPX UNIT AM0114

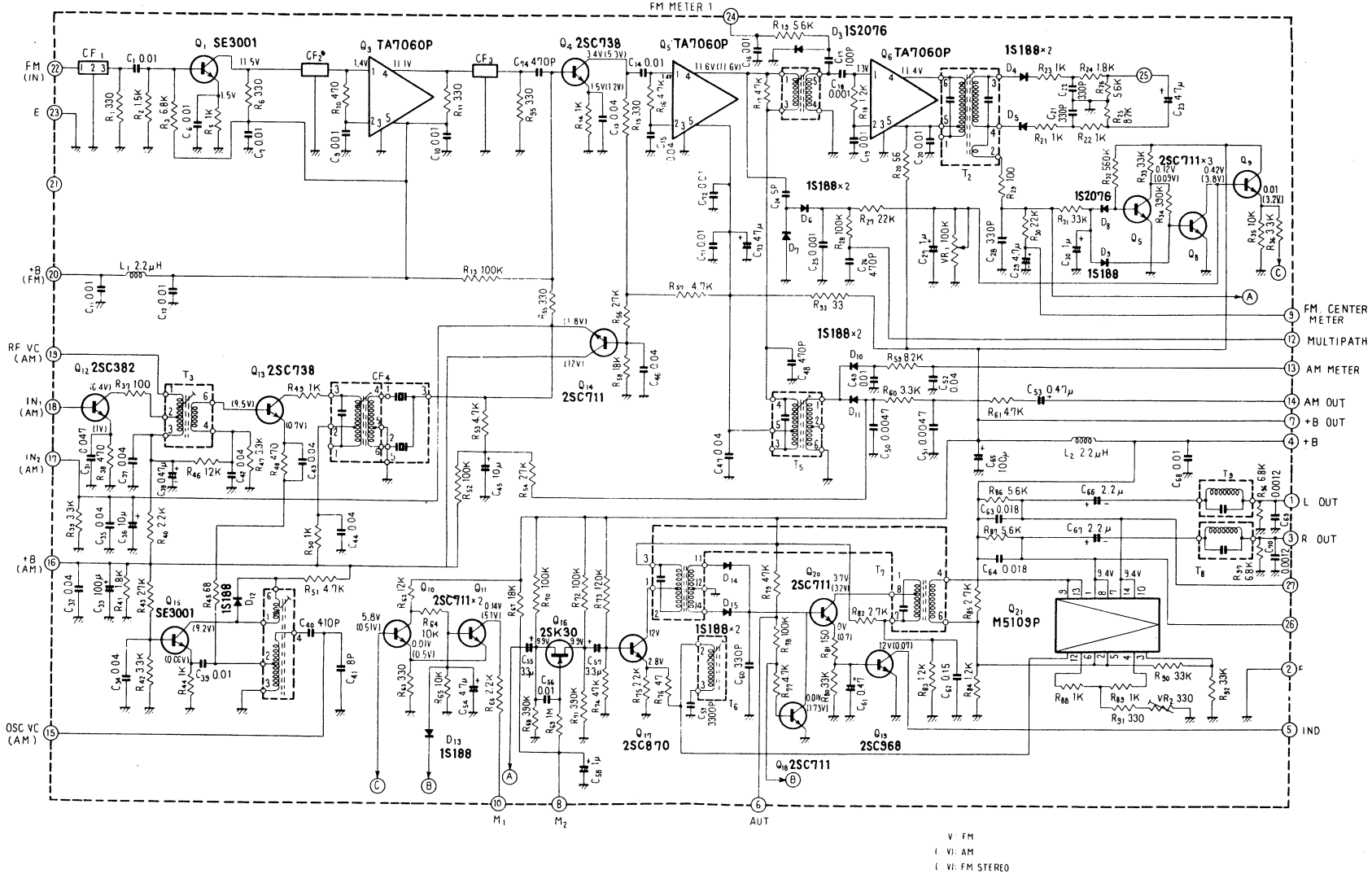


34

SX-626

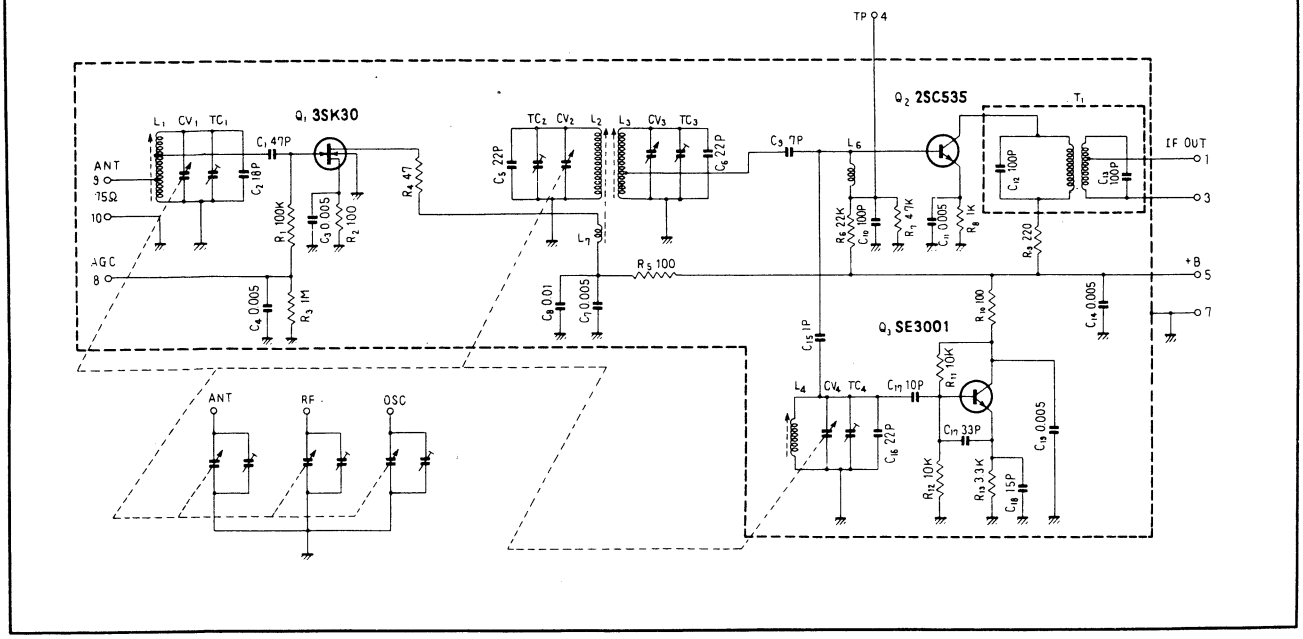

ANTENNA TERMINALS
AM
GND
FM 300Ω
FM 75Ω
FM FRONT END AWB-008 AWB-009 (FTZ Approved)
FM/AM TUNER UNIT AWE-011
R-UNIT AWX-007
STEREO INDICATOR 6V 0.03A
8V 0.05A × 6
FTZ requires no C9 and C10
DIAL SCALE 8V 0.3A × 5
POWER SUPPLY UNIT AWR-006
42mA/AM, 53mA/FM
TO HEAD AMP
SIGNAL METER
SIGNAL METER LAMP 8V 0.3A
LEFT CH.
RIGHT CH.
PHONO 1
PHONO 2
AUX
TAPE 1 MON 1
TAPE 1 REC 1
TAPE 2 MON 2
TAPE 2 REC 2
MICROPHONE JACK
HEAD AMP UNIT W21-004
SWITCH UNIT AWS-014
CONTROL AMP UNIT AWG-008
SWITCH UNIT AWS-013
MAIN AMP UNIT AMH-002
HEADPHONE
SPEAKERS A
SPEAKERS B
PRE OUT
MAIN IN
S1 INPUT SELECTOR
1) AM
2) FM MONO
3) FM AUTO
4) PHONO 1
5) PHONO 2
6) MIC
7) AUX
(AM Position)
S2 POWER SWITCH & SPEAKER SELECTOR
1) POWER OFF
2) POWER ON SPEAKER A
3) SPEAKER OFF
4) SPEAKER B
5) SPEAKER C
6) SPEAKER A+B
7) SPEAKER A+C
(POWER OFF Position)
NOTES:
⇦: AT NO INPUT SIGNAL
V: AT NO INPUT SIGNAL
AT MAXIMUM INPUT SIGNAL
SIGNAL VOLTAGE AT 30W/8Ω POWER OUTPUTS.
50μ SEC
75μ SEC
S4
C12 0.0082
C13 0.0082
FM/AM TUNER UNIT
In some five-line voltage areas, de-emphasis selector switch (75μ 50μsec) is provided as the above.
POWER SUPPLY CIRCUIT FOR MODELS WITH S-POSITION VOLTAGE SELECTOR
AC 110V 120V 130V 220V 240V 50-60Hz

FM/AM TUNER UNIT
AWE-011



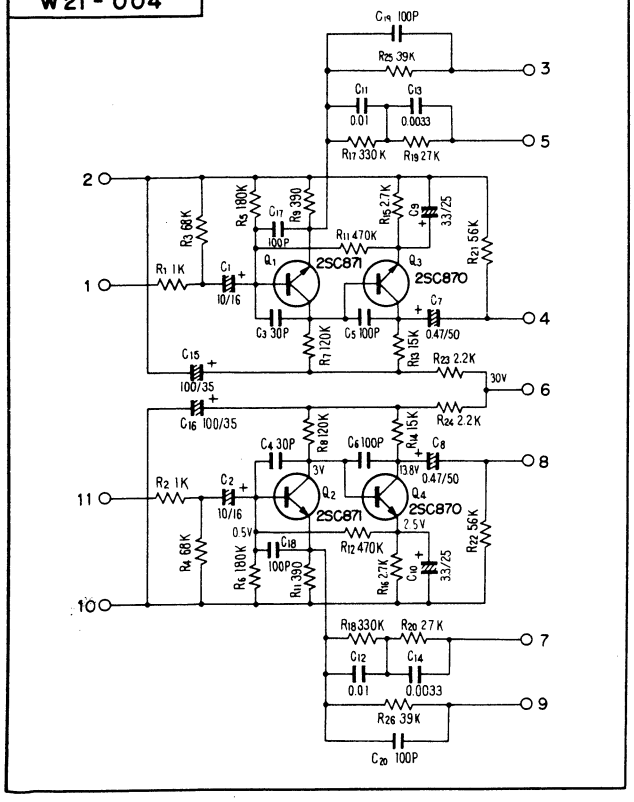
FM FRONT END

FM-FRONT END
AWB-008
AWB-009 (FTZ APPROVED)



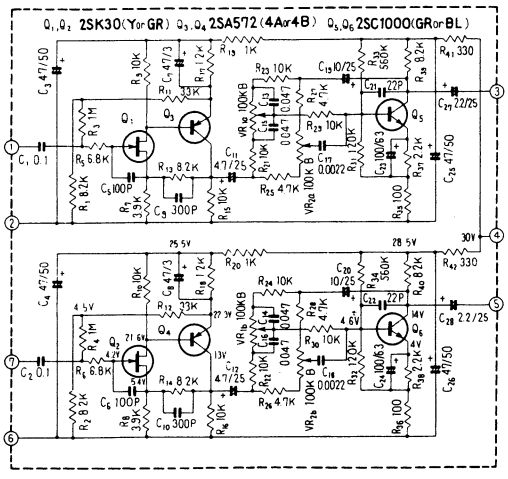
HEAD AMP UNIT

HEAD AMP UNIT
W21-004



CONTROL AMP UNIT

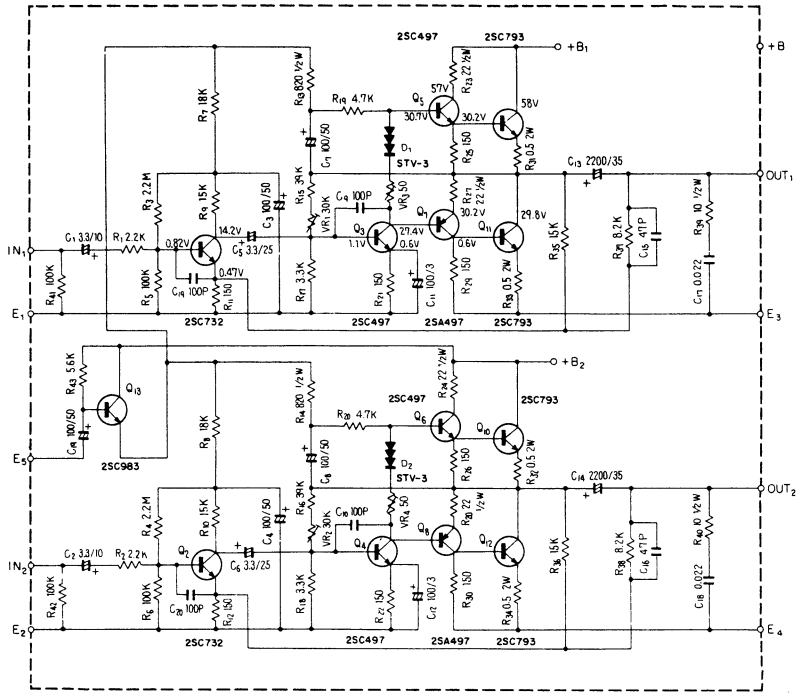
CONTROL AMP UNIT
AWG-008



37

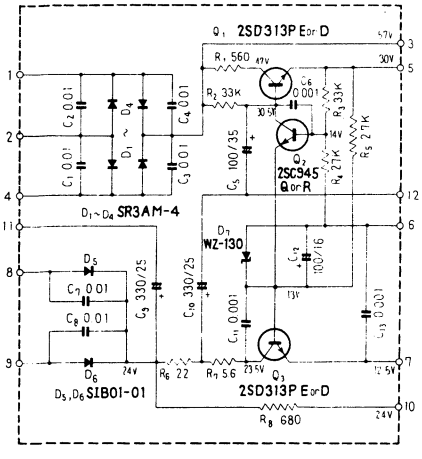
MAIN AMP UNIT

MAIN AMP UNIT
AWH - 002



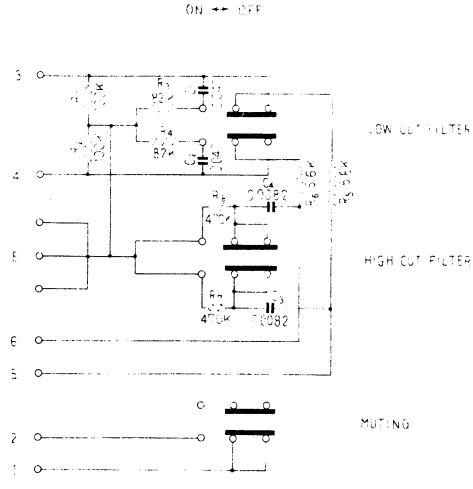
POWER SUPPLY UNIT

POWER SUPPLY UNIT
AWR - 006

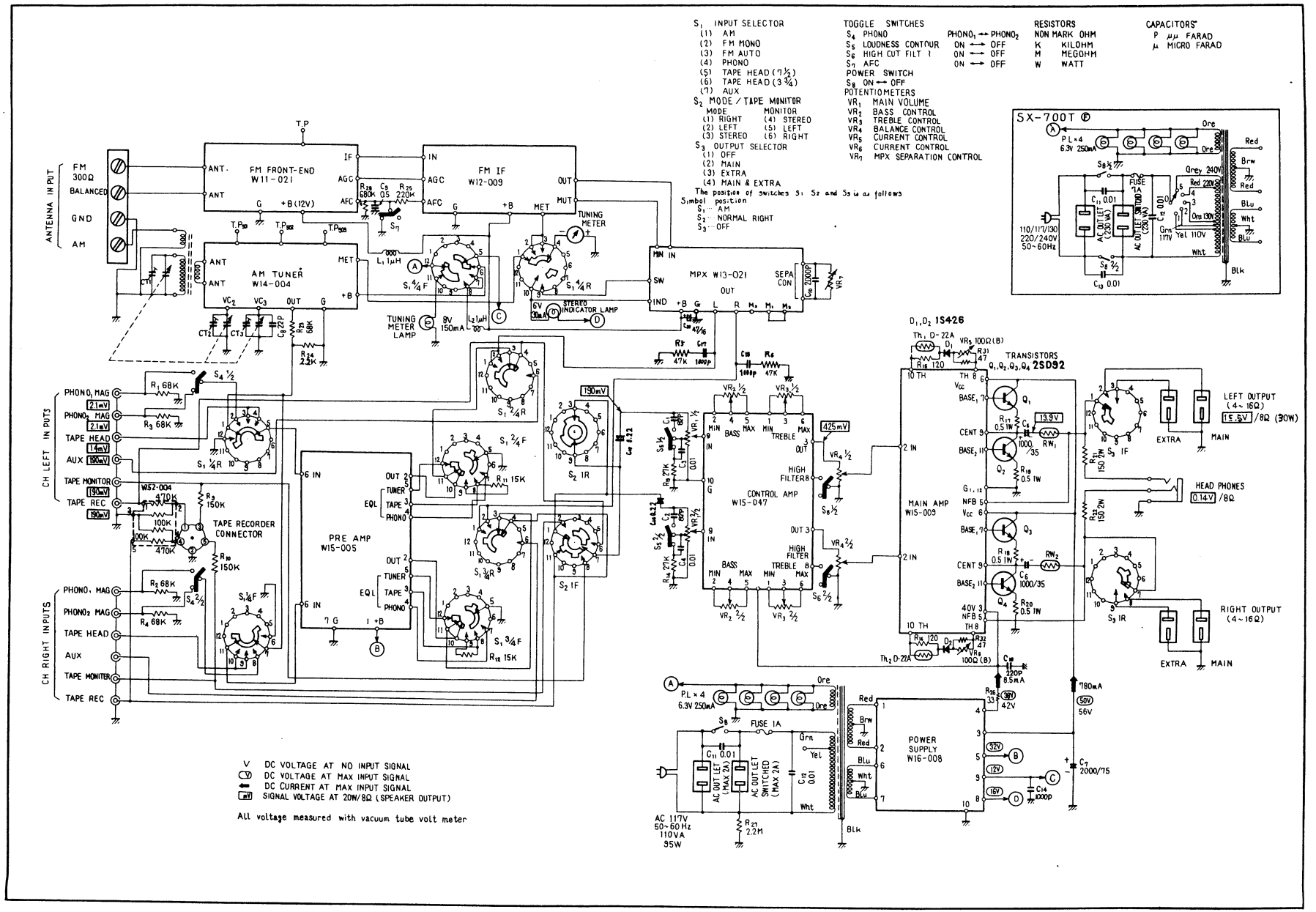


SWITCH UNIT

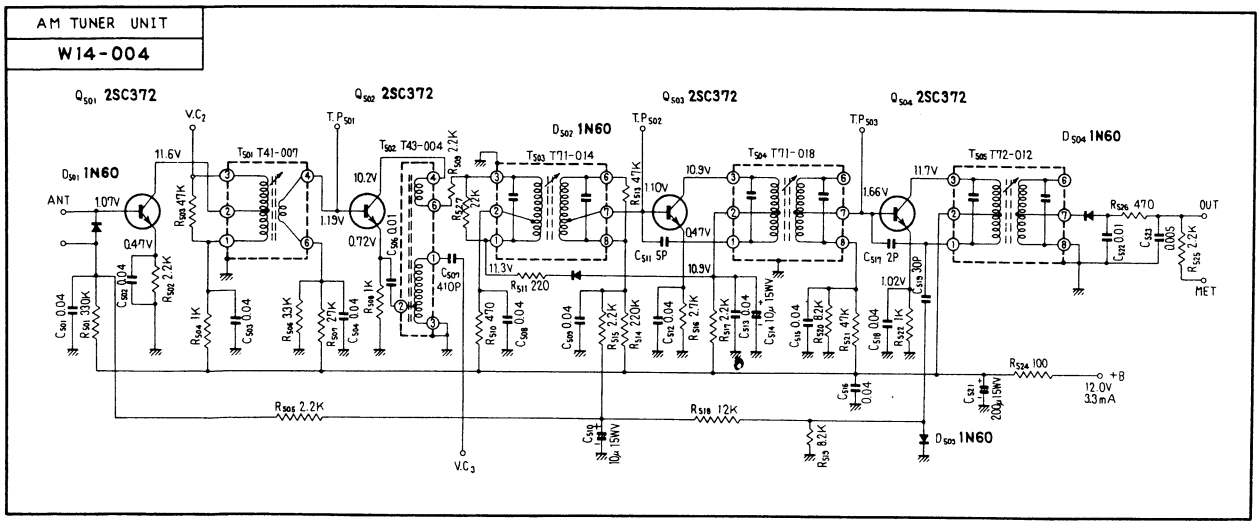
SWITCH UNIT
AWS - 013



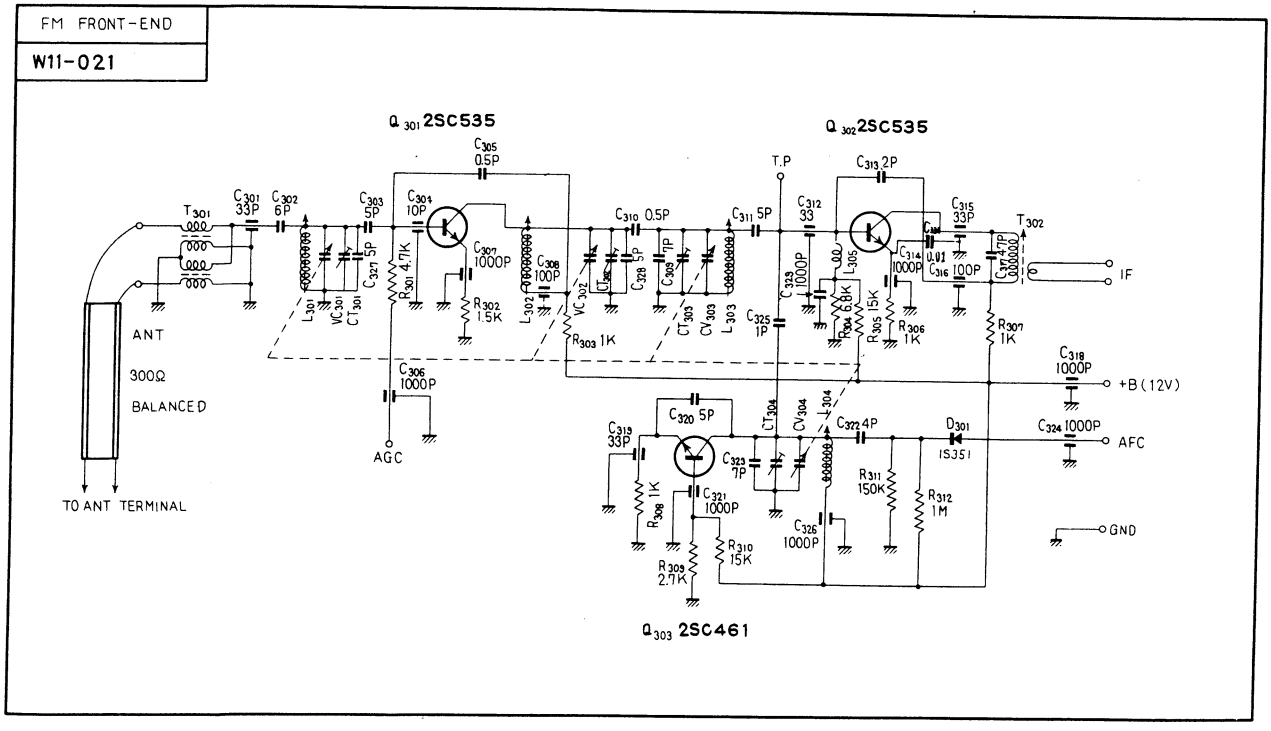
Model SX-700T, SX-700Ⓕ



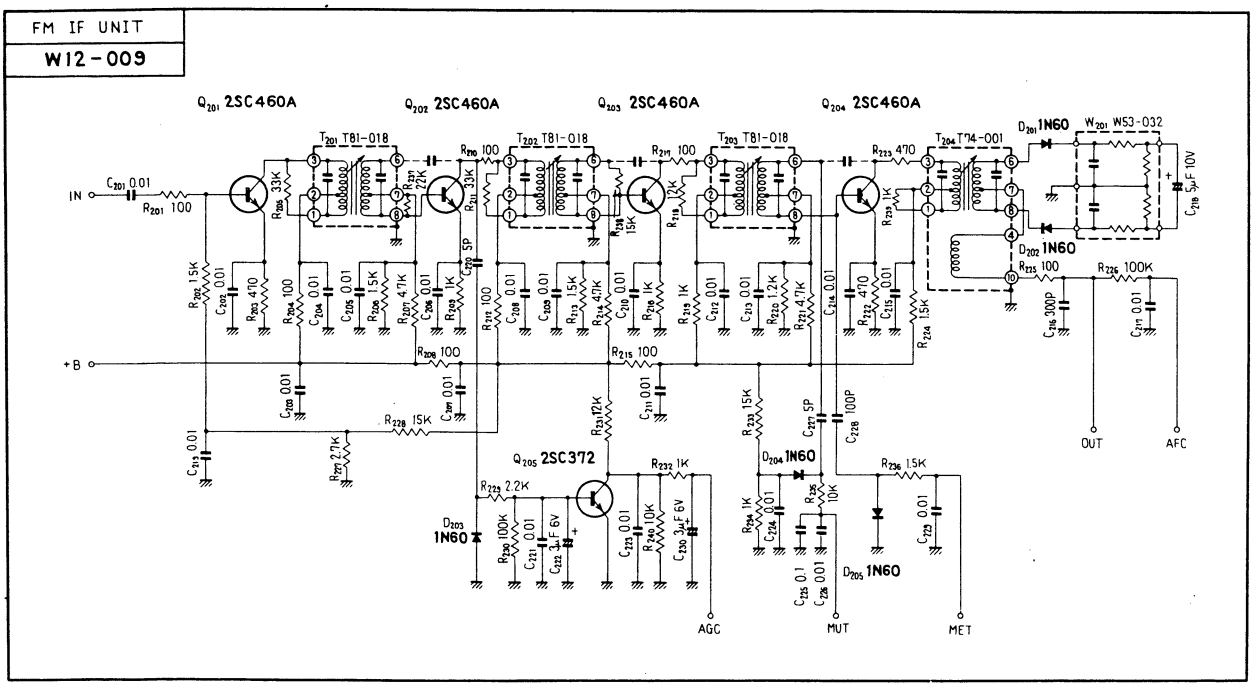
AM TUNER UNIT W14-004



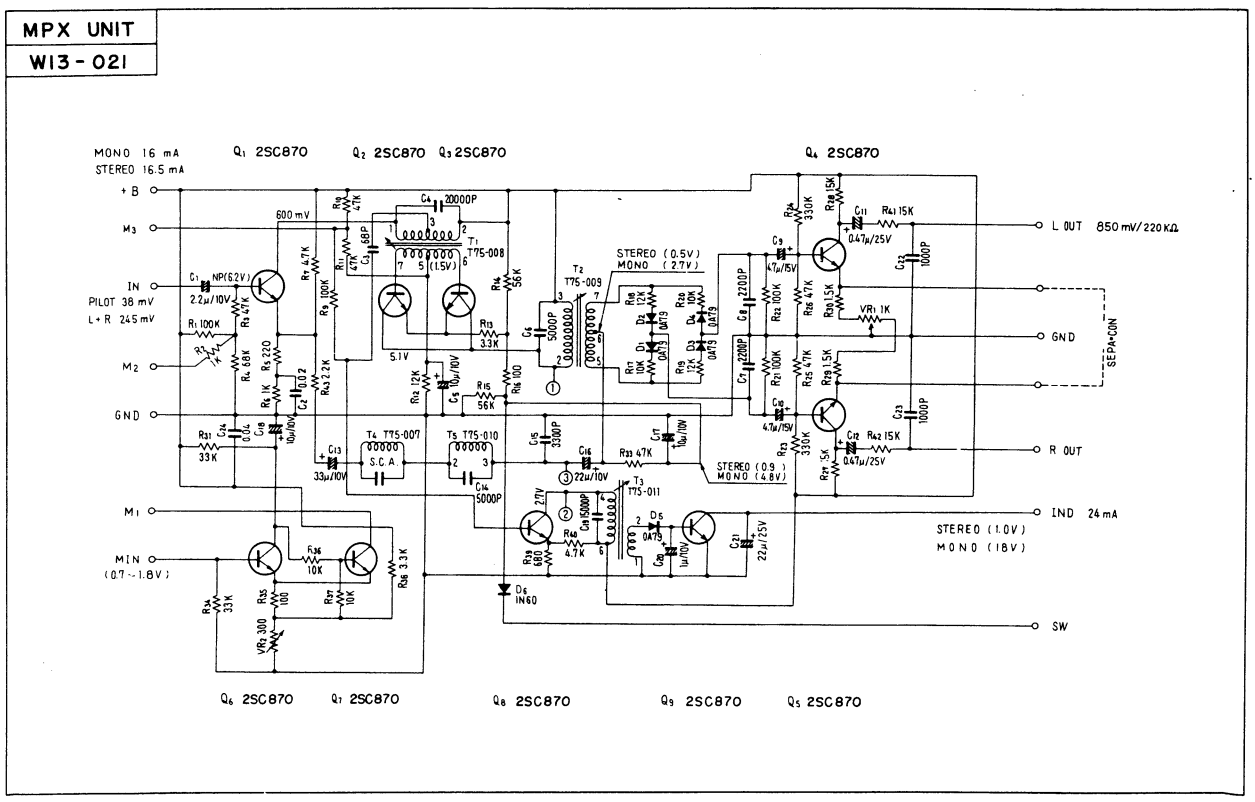
FM FRONTEND W11-021



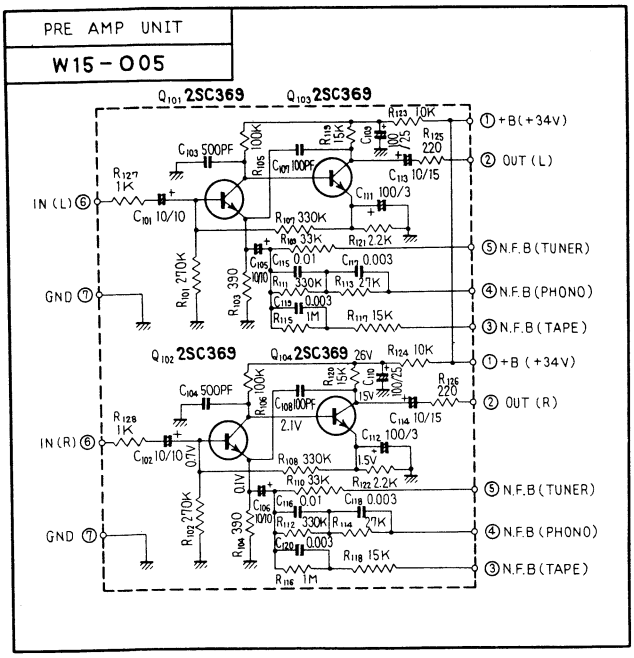
FM IF UNIT W12-009



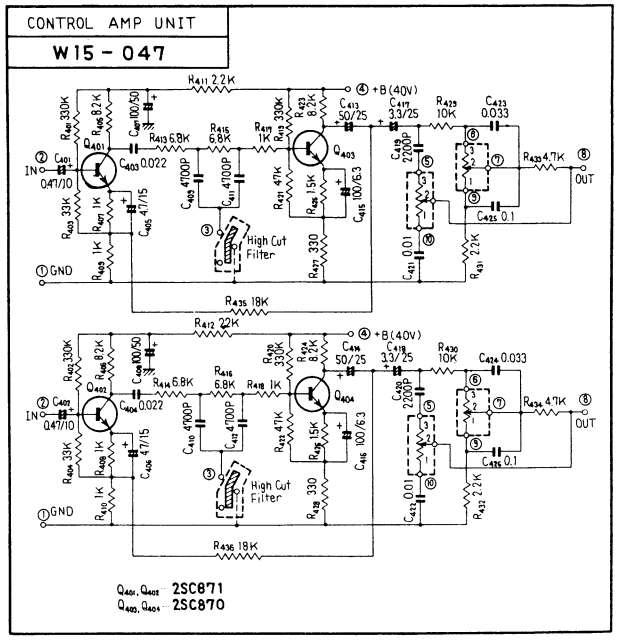
MPX UNIT W13-021



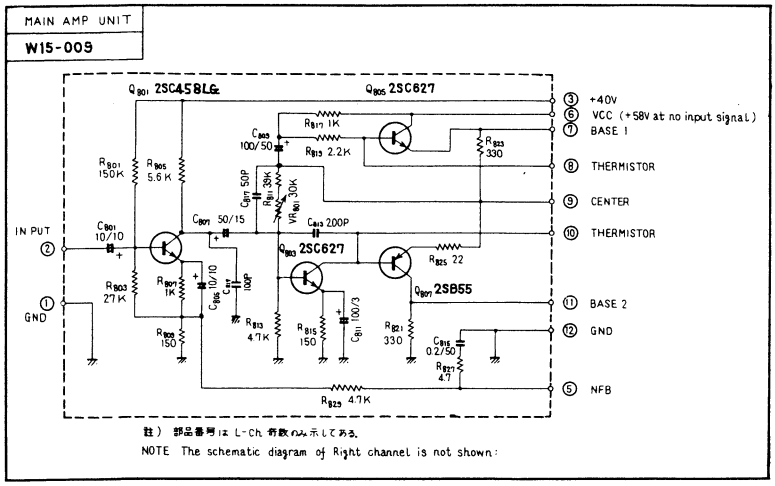
PRE AMP UNIT W15-005



CONTROL AMP UNIT W15-047

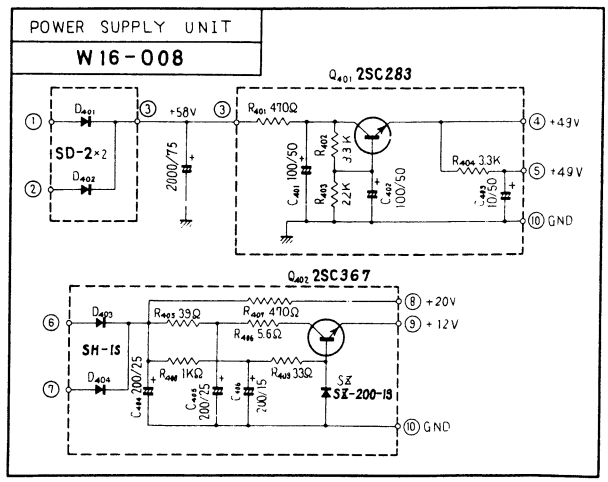


MAIN AMP UNIT W15-009



註) 部品番号は L-ch 分数のみ示してある。
NOTE The schematic diagram of Right channel is not shown.

POWER SUPPLY UNIT W16-008

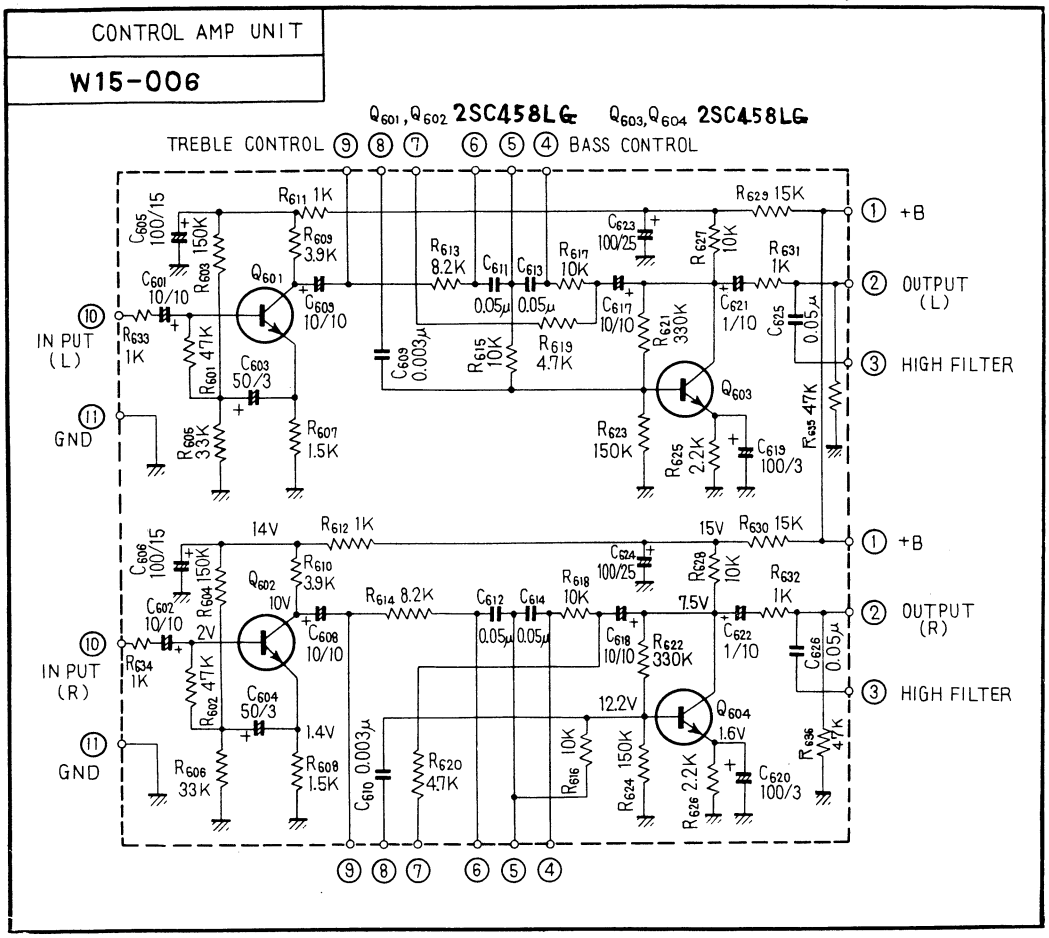


42

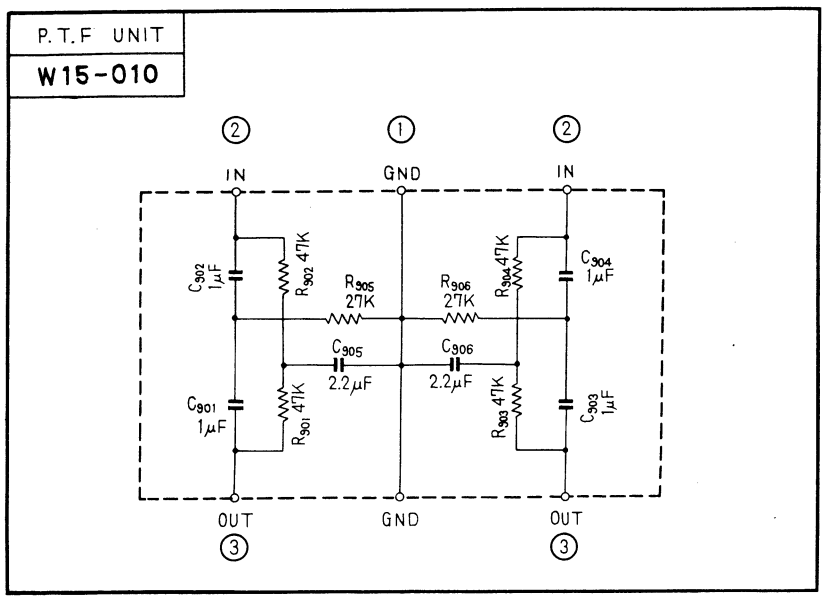
NOTE:

If your set is provided with the CONTROL AMP UNIT and the FILTER UNIT separately, refer to the following circuit diagrams.

CONTROL AMP UNIT W15-006

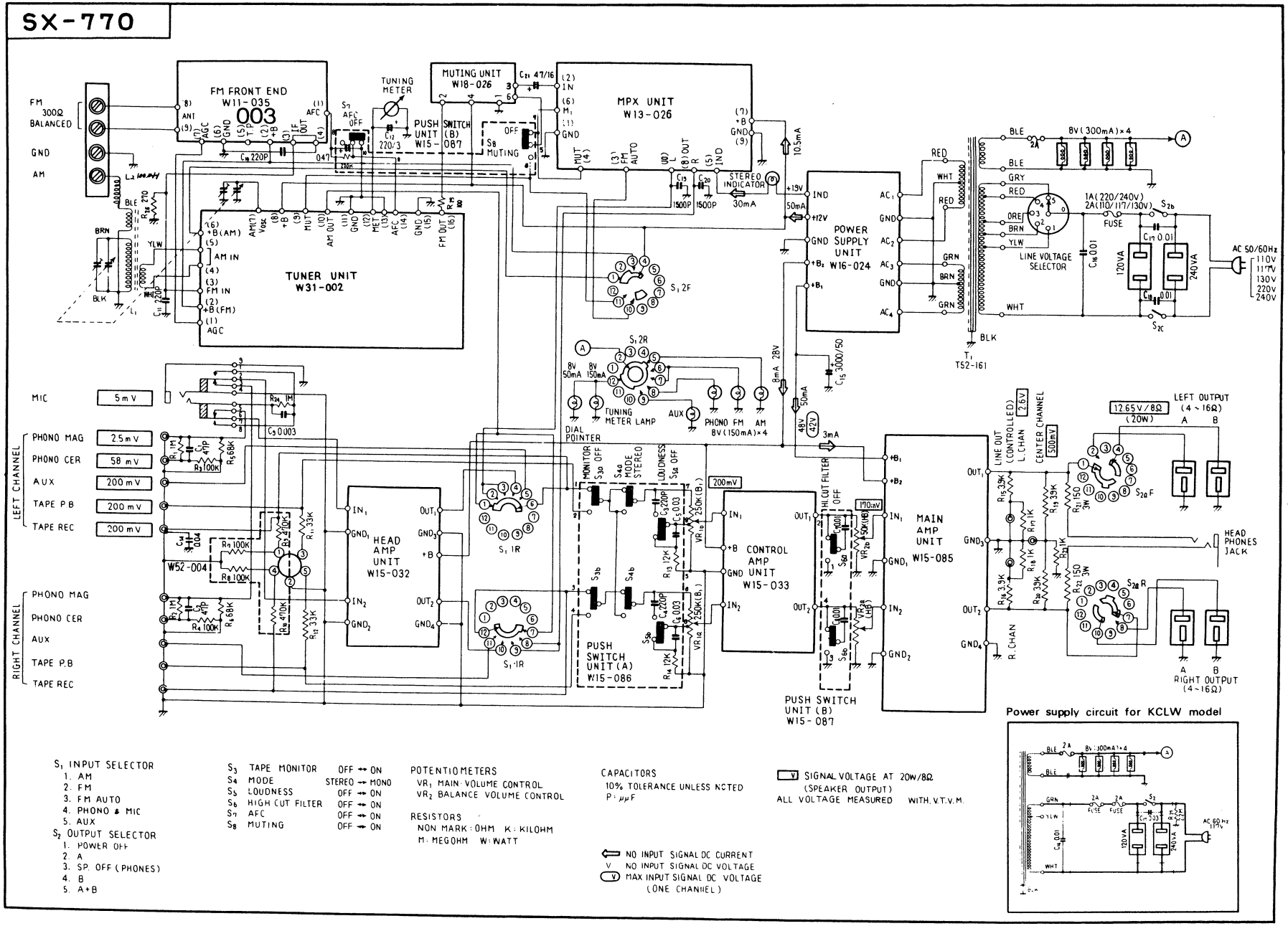


P.T.F. UNIT W15-010



43

SX-770



S_1 INPUT SELECTOR
1. AM
2. FM
3. FM AUTO
4. PHONO & MIC
5. AUX

S_2 OUTPUT SELECTOR
1. POWER OFF
2. A
3. SP. OFF (PHONES)
4. B
5. A+B

S_3 TAPE MONITOR OFF ↔ ON
S_4 MODE STEREO ↔ MONO
S_5 LOUDNESS OFF ↔ ON
S_6 HIGH CUT FILTER OFF ↔ ON
S_7 AFC OFF ↔ ON
S_8 MUTING OFF ↔ ON

POTENTIOMETERS
VR_1 MAIN VOLUME CONTROL
VR_2 BALANCE VOLUME CONTROL

RESISTORS
NON MARK : OHM K : KILOHM
M : MEGOHM W : WATT

CAPACITORS
10% TOLERANCE UNLESS NOTED
P : μμF

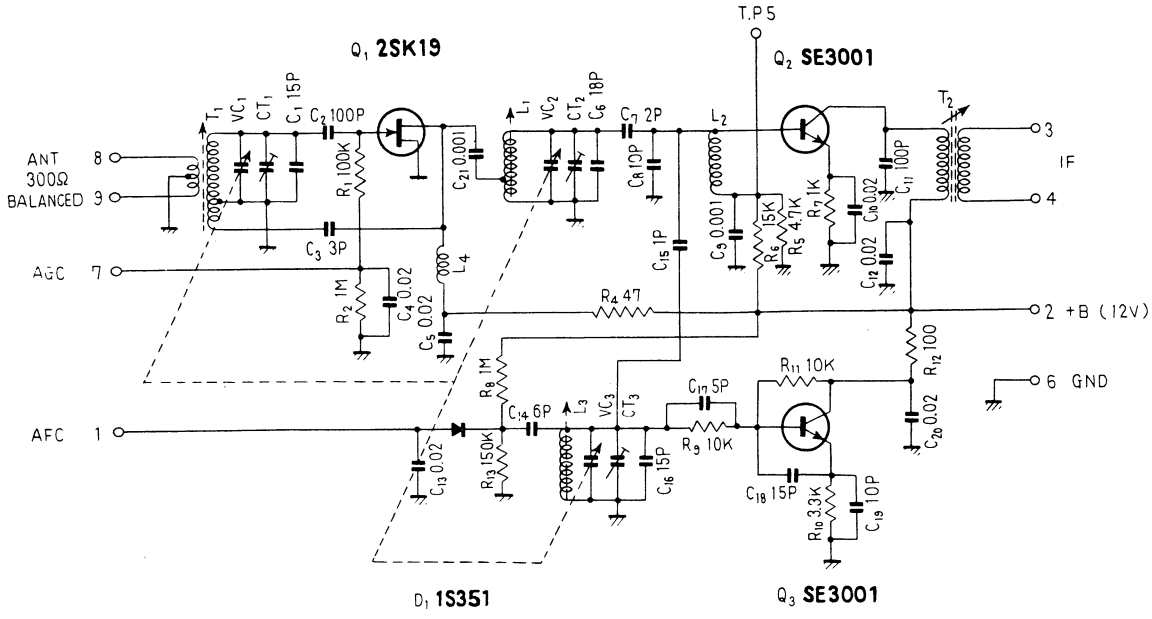
⇦ NO INPUT SIGNAL DC CURRENT
V NO INPUT SIGNAL DC VOLTAGE
(V) MAX INPUT SIGNAL DC VOLTAGE (ONE CHANNEL)

[V] SIGNAL VOLTAGE AT 20W/8Ω (SPEAKER OUTPUT)
ALL VOLTAGE MEASURED WITH V.T.V.M.

Power supply circuit for KCLW model

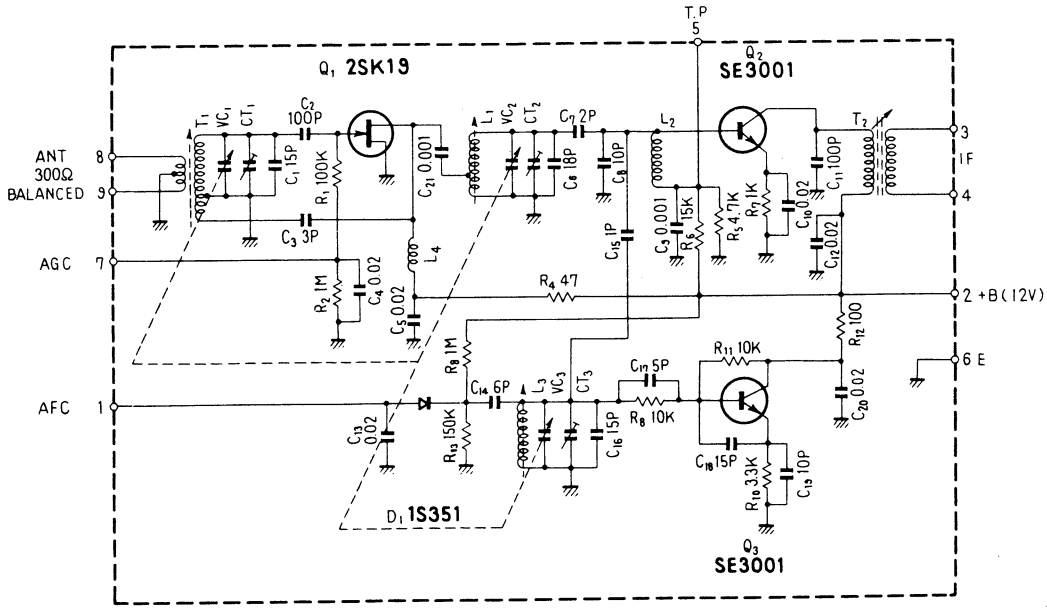
FM FRONT END

FM FRONT END
W11-035



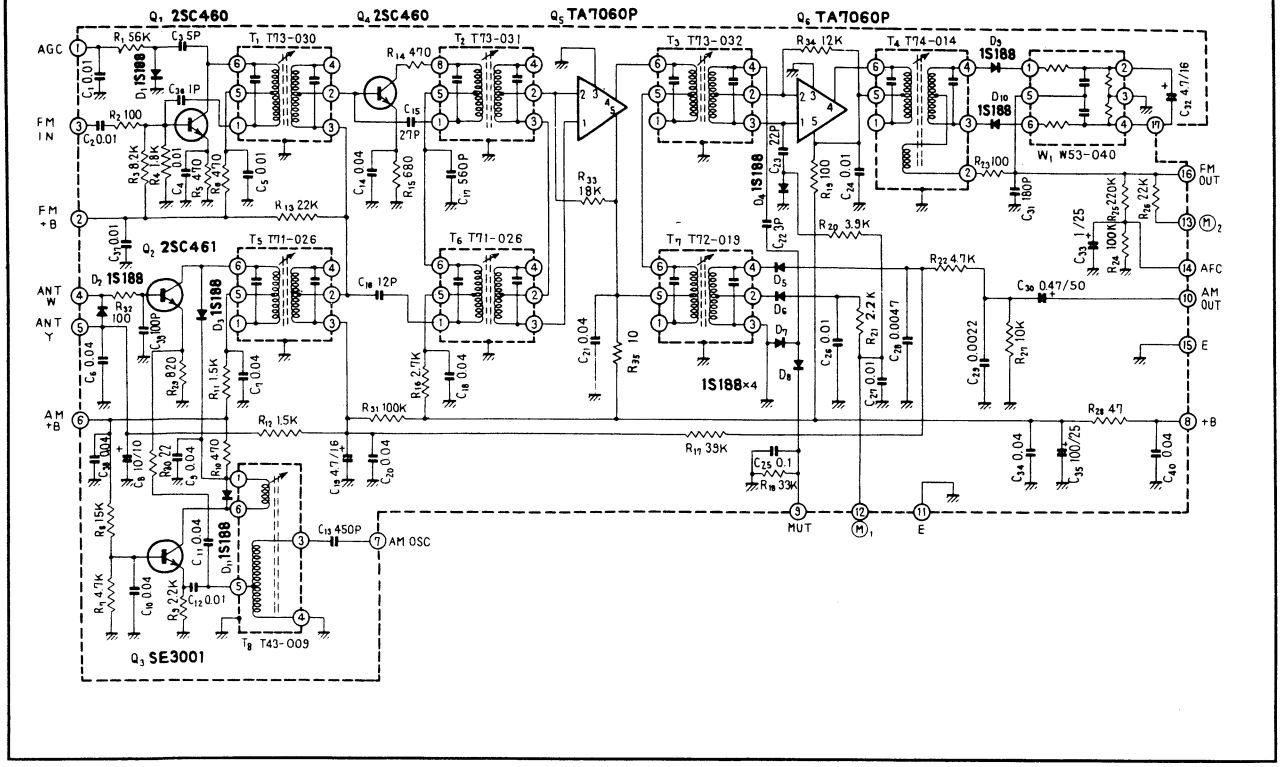
FM FRONT END for FVZW model

FM FRONT END
AWB-003



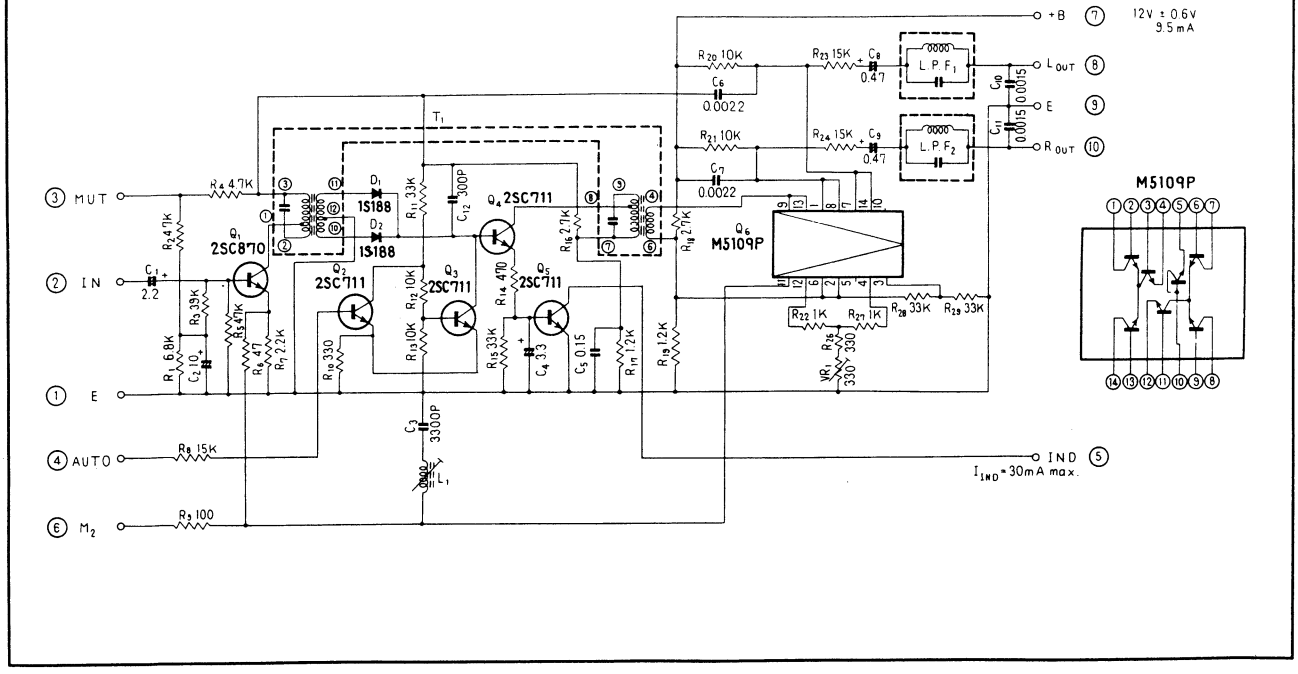
TUNER UNIT

TUNER UNIT
W31 - 002



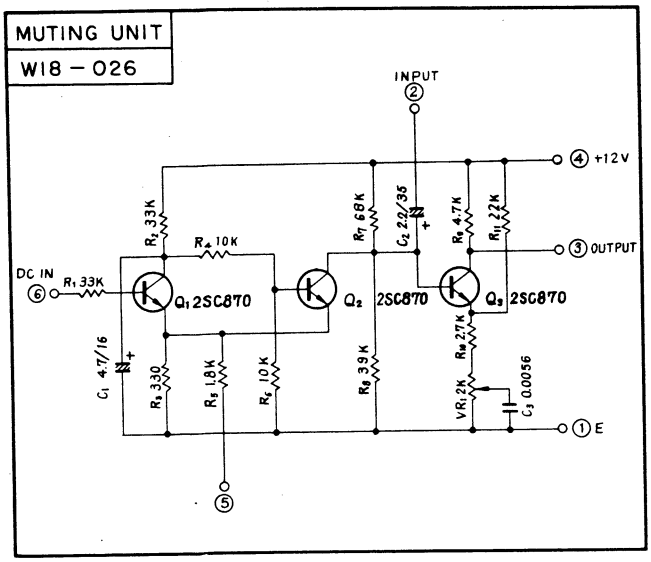
MPX UNIT

MPX UNIT
W13 - 026

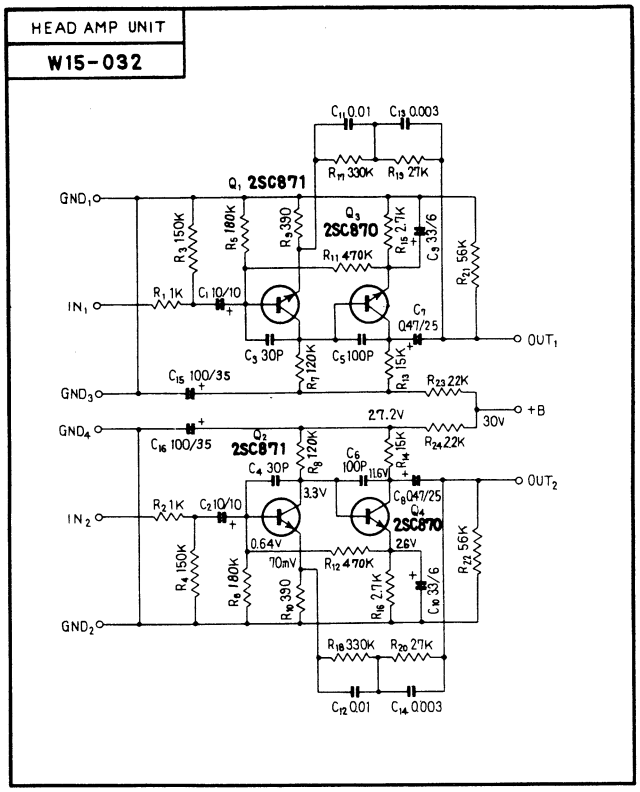


46

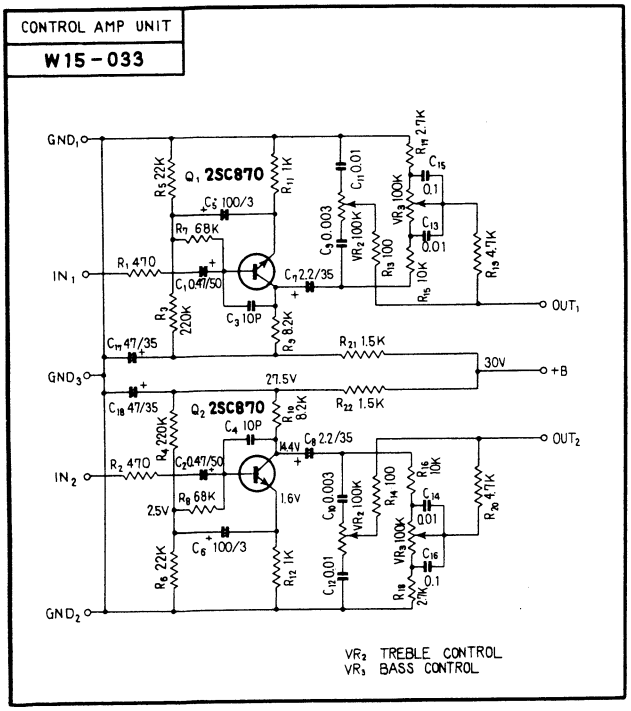
MUTING UNIT



HEAD AMP UNIT

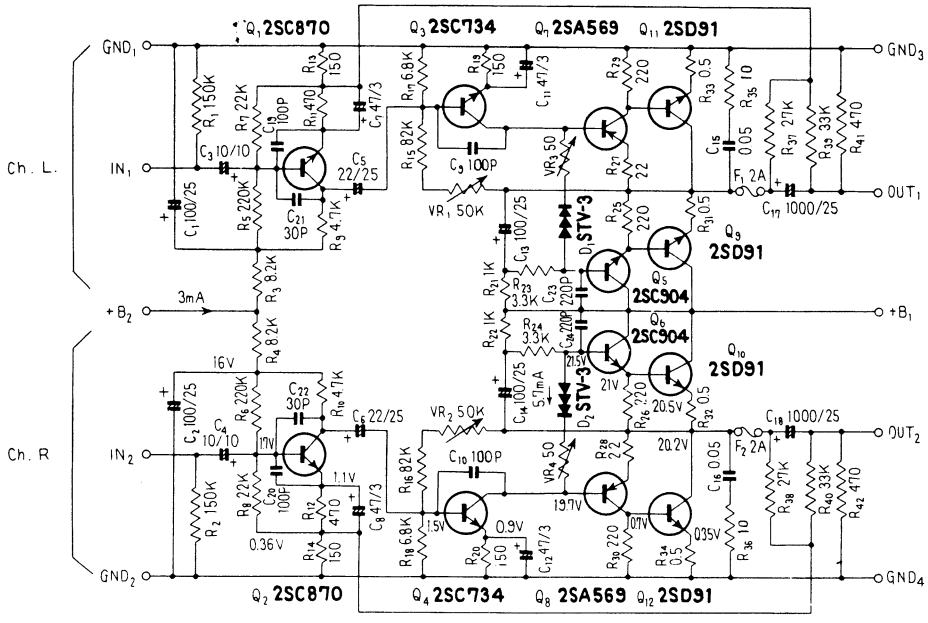


CONTROL AMP UNIT



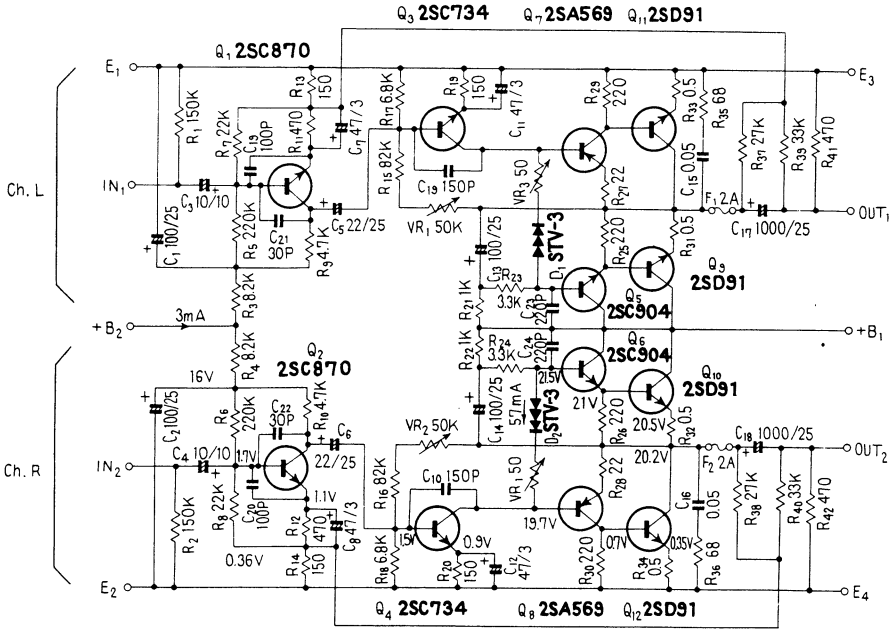
MAIN AMP UNIT

MAIN AMP UNIT
W15-085



MAIN AMP UNIT For NBW model

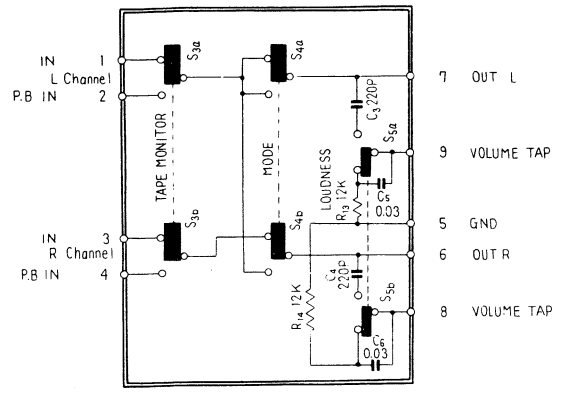
MAIN AMP UNIT
W23-005



48

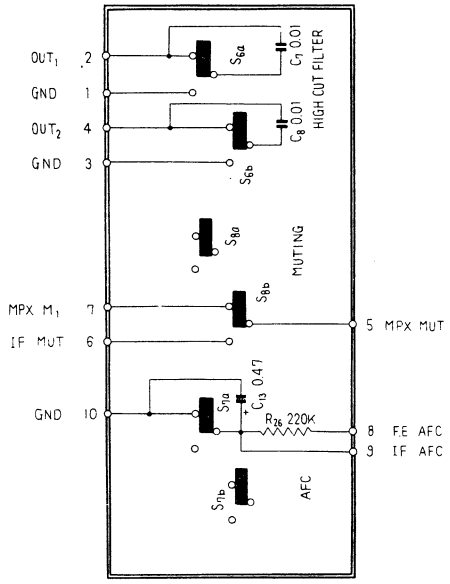
PUSH SWITCH UNIT

PUSH SWITCH UNIT (A)
W15 - 086



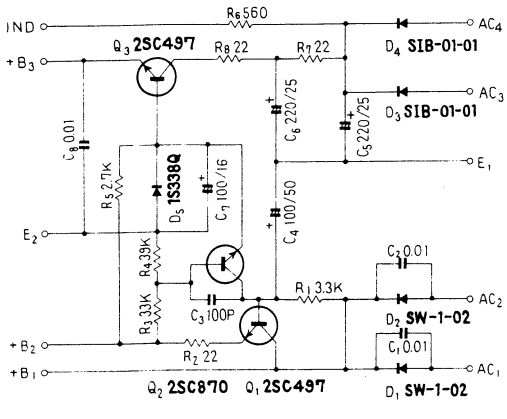
PUSH SWITCH UNIT

PUSH SWITCH UNIT (B)
W15 - 087



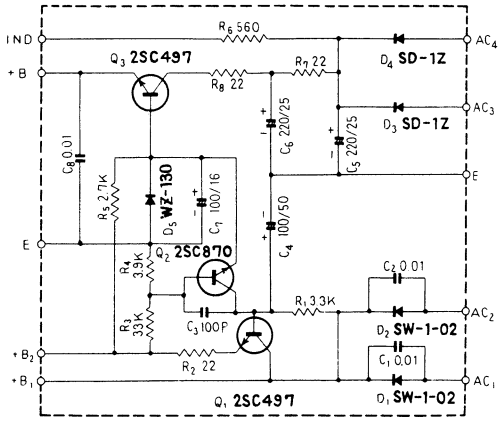
POWER SUPPLY UNIT

POWER SUPPLY UNIT
W16 - 024

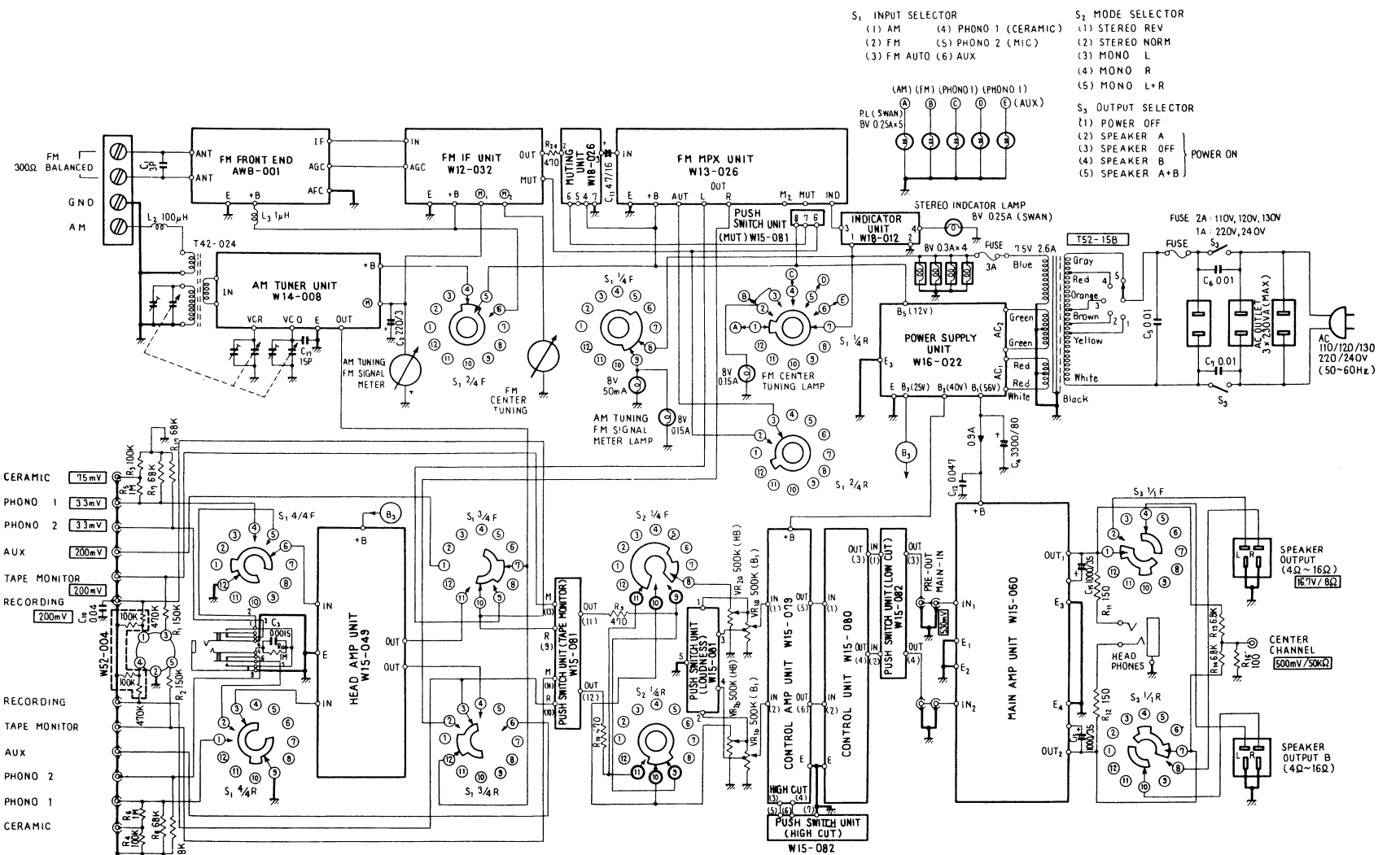


POWER SUPPLY UNIT for NBW model

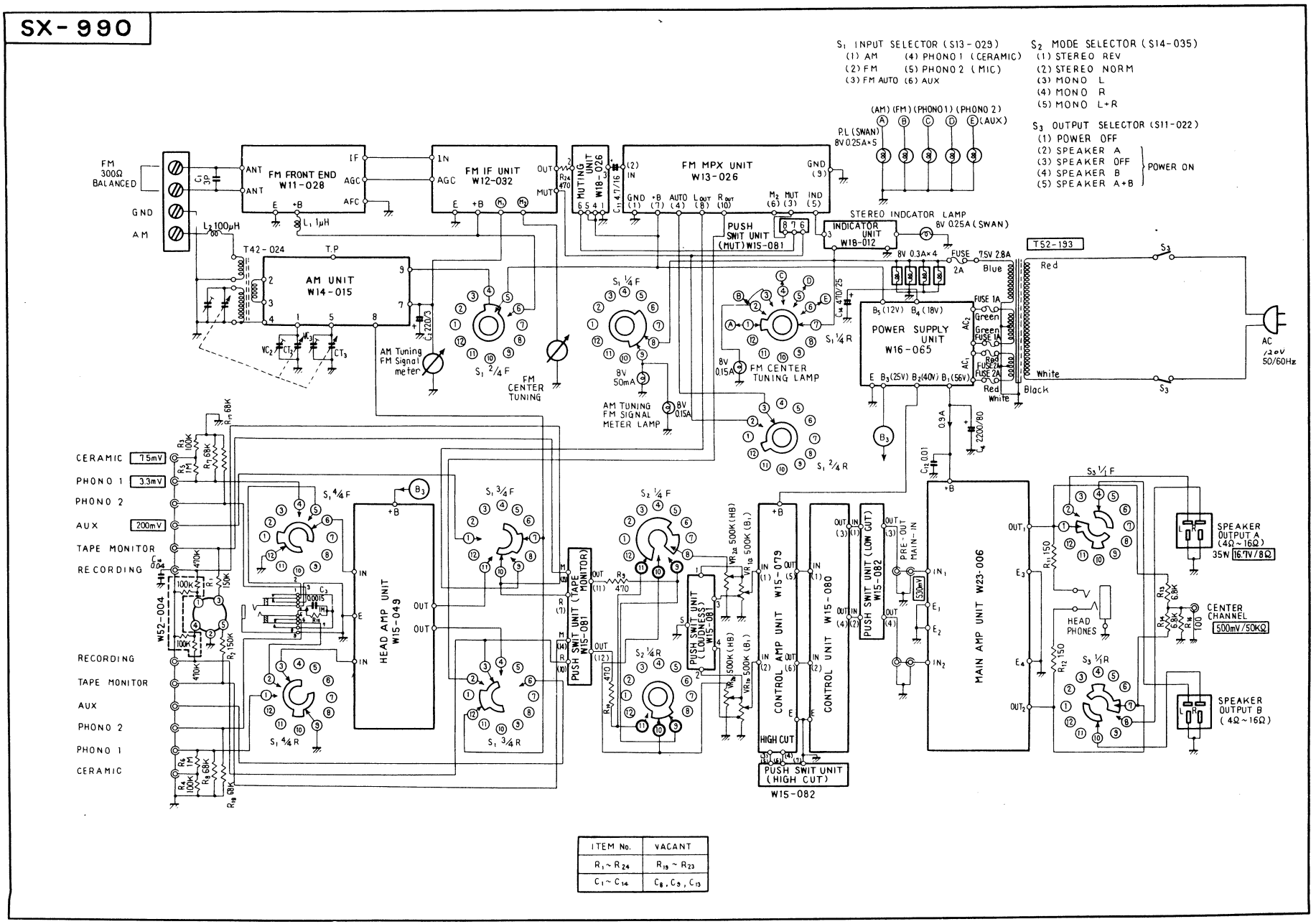
POWER SUPPLY UNIT
W16 - 064



SX-990


S1 INPUT SELECTOR
(1) AM (4) PHONO 1 (CERAMIC)
(2) FM (5) PHONO 2 (MIC)
(3) FM AUTO (6) AUX
S2 MODE SELECTOR
(1) STEREO REV
(2) STEREO NORM
(3) MONO L
(4) MONO R
(5) MONO L+R
S3 OUTPUT SELECTOR
(1) POWER OFF
(2) SPEAKER A
(3) SPEAKER OFF
(4) SPEAKER B
(5) SPEAKER A+B
POWER ON
(AM) (FM) (PHONO1) (PHONO1) (AUX)
P.L (SWAN) 8V 0.25A×5
FM 300Ω BALANCED
GND
AM
FM FRONT END AWB-001
FM IF UNIT W12-032
MUTING UNIT W18-026
FM MPX UNIT W13-026
PUSH SWITCH UNIT (MUT) W15-081
INDICATOR UNIT W18-012
STEREO INDCATOR LAMP 8V 0.25A (SWAN)
FUSE 2A : 110V, 120V, 130V
1A : 220V, 240V
T52-15B
AM TUNER UNIT W14-008
T42-024
AM TUNING FM SIGNAL METER
FM CENTER TUNING
AM TUNING FM SIGNAL METER LAMP
FM CENTER TUNING LAMP
POWER SUPPLY UNIT W16-022
AC OUTLET 3×230VA (MAX)
AC 110/120/130 220/240V (50~60Hz)
CERAMIC 75mV
PHONO 1 3.3mV
PHONO 2 3.3mV
AUX 200mV
TAPE MONITOR 200mV
RECORDING 200mV
HEAD AMP UNIT W15-049
PUSH SWITCH UNIT (TAPE MONITOR) W15-081
PUSH SWITCH UNIT (LOUDNESS) W15-061
CONTROL AMP UNIT W15-079
CONTROL UNIT W15-080
PUSH SWITCH UNIT (LOW CUT) W15-082
PRE-OUT MAIN-IN
MAIN AMP UNIT W15-060
PUSH SWITCH UNIT (HIGH CUT) W15-082
SPEAKER OUTPUT (4Ω~16Ω) 16.7V/8Ω
CENTER CHANNEL 500mV/50KΩ
HEAD PHONES
SPEAKER OUTPUT B (4Ω~16Ω)

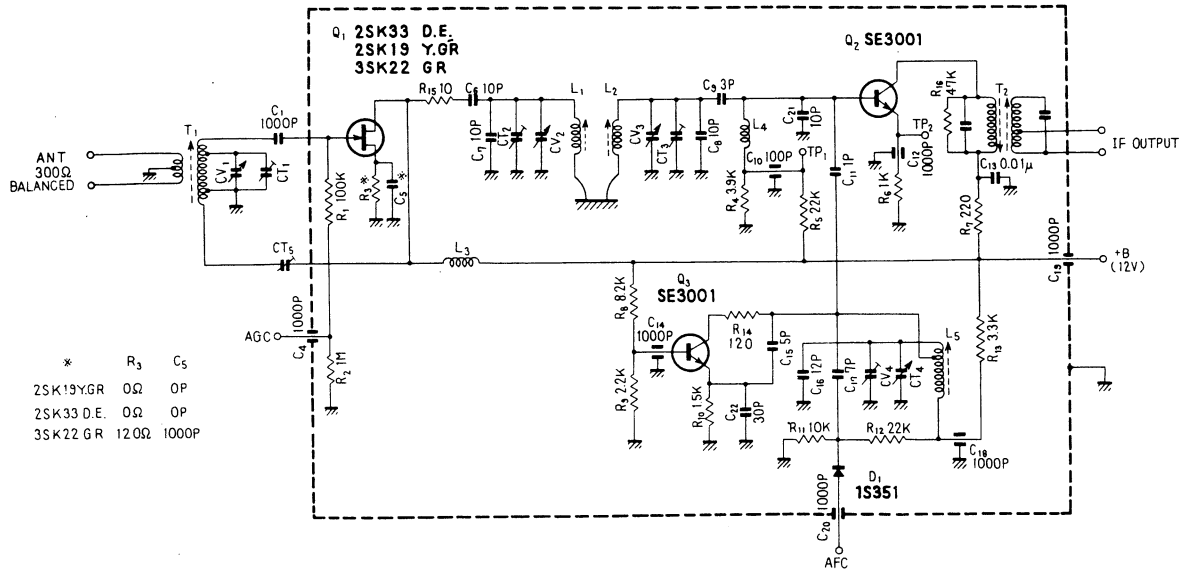
SX-990



ITEM No.	VACANT
$R_1 \sim R_{24}$	$R_{19} \sim R_{23}$
$C_1 \sim C_{14}$	C_8, C_9, C_{13}

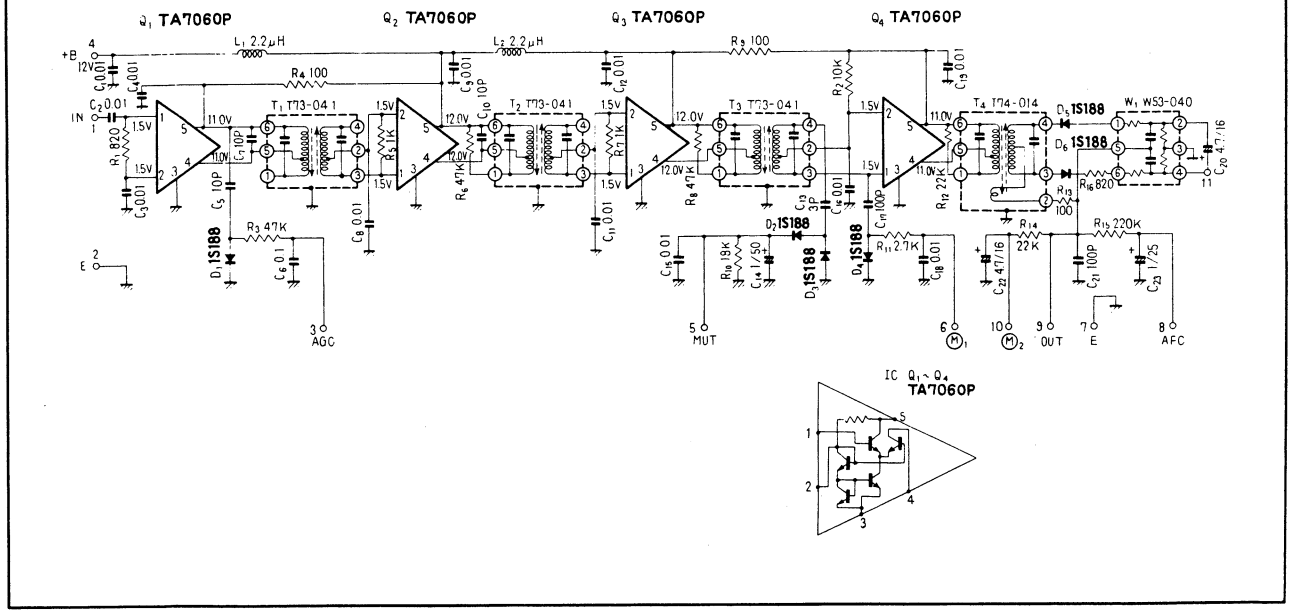
FM FRONT END for FVZW model

FM FRONT END
AWB-001



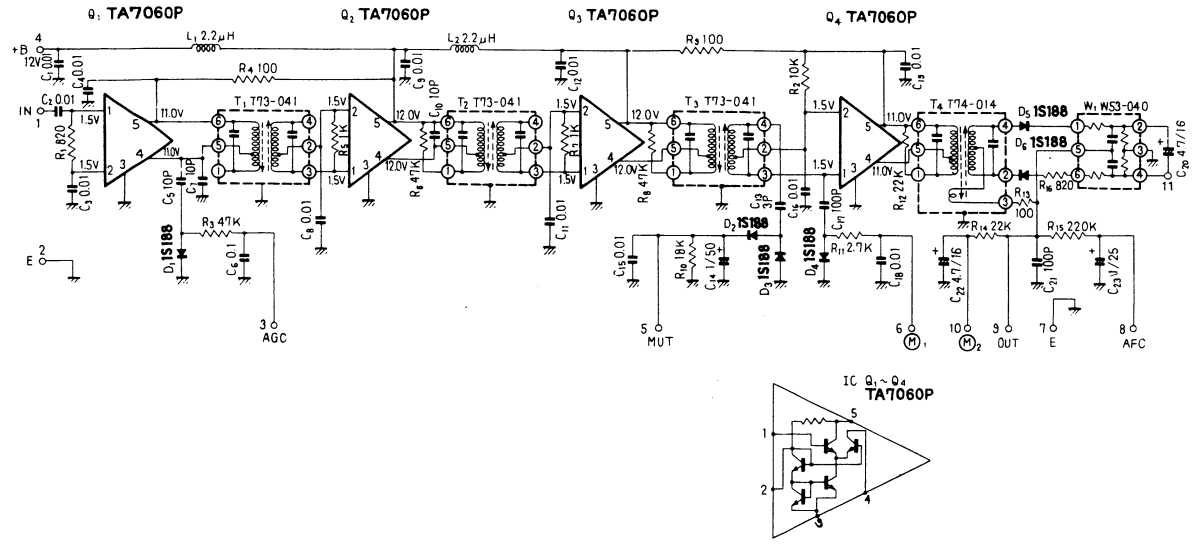
FM IF UNIT

FM IF UNIT
W12-031



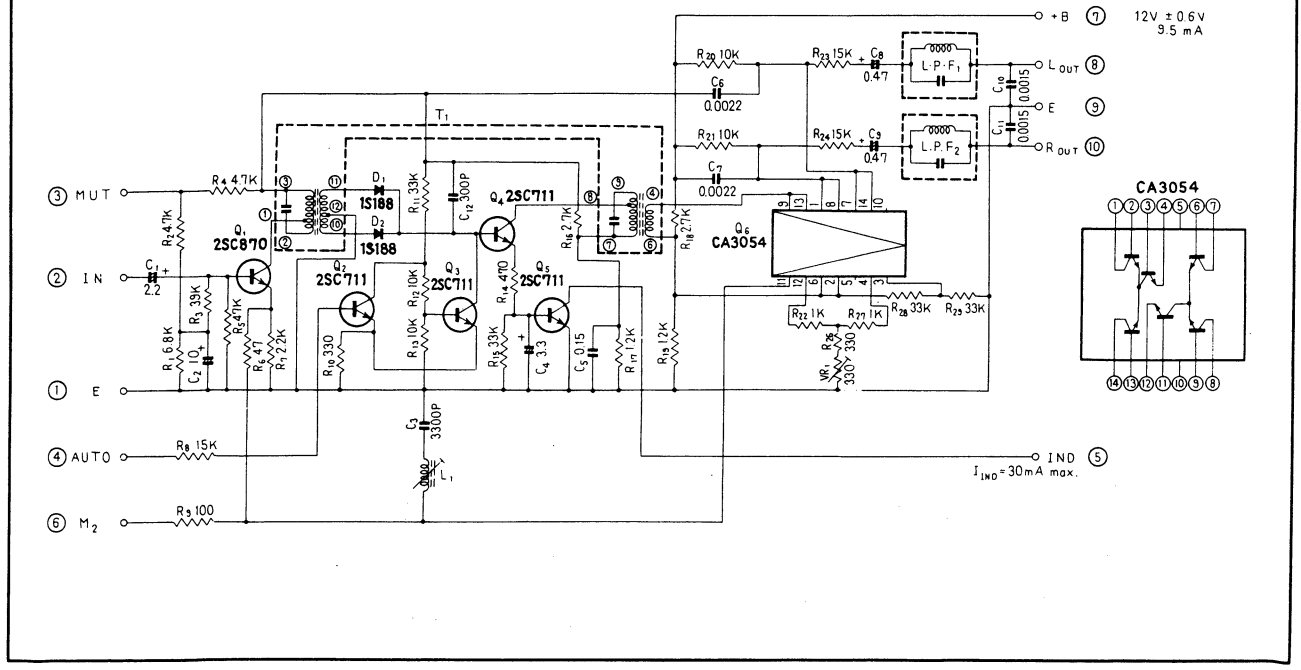
FM IF UNIT for FVW, FVZW , KCW, KUW, NBW model

FM IF UNIT
W12-032



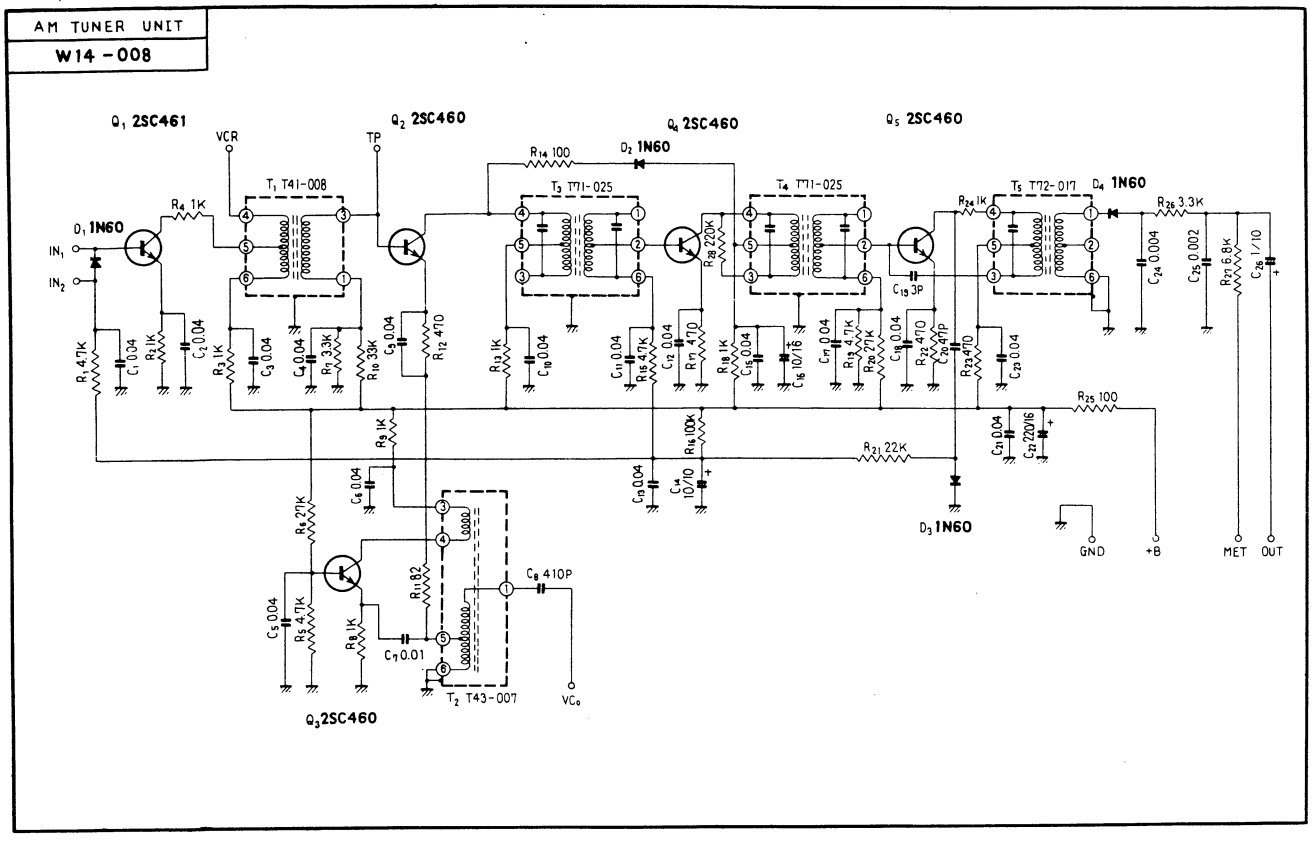
MPX UNIT

MPX UNIT
W13-026

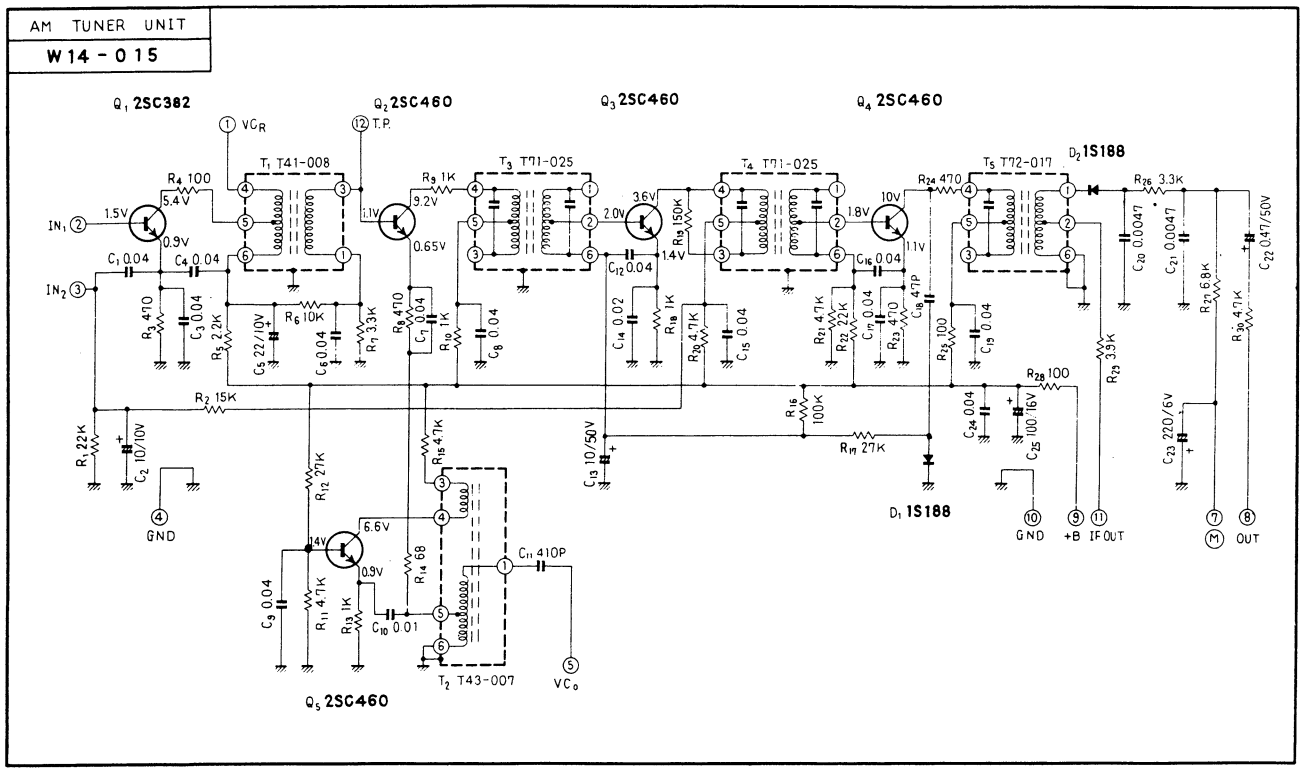


53

AM TUNER UNIT

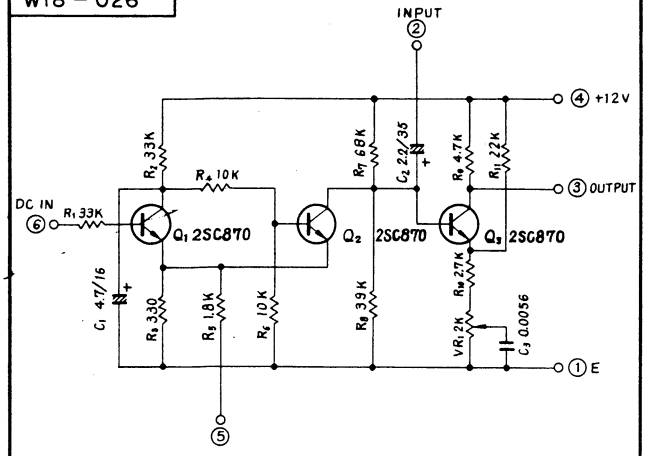


AM TUNER UNIT for NBW model



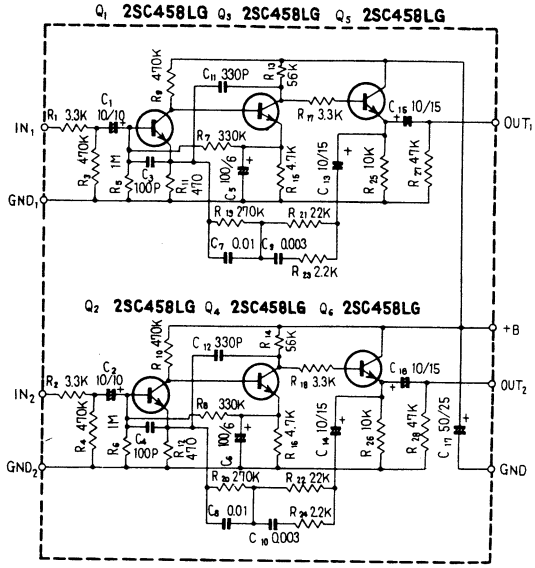
MUTING UNIT

MUTING UNIT
W18 – 026



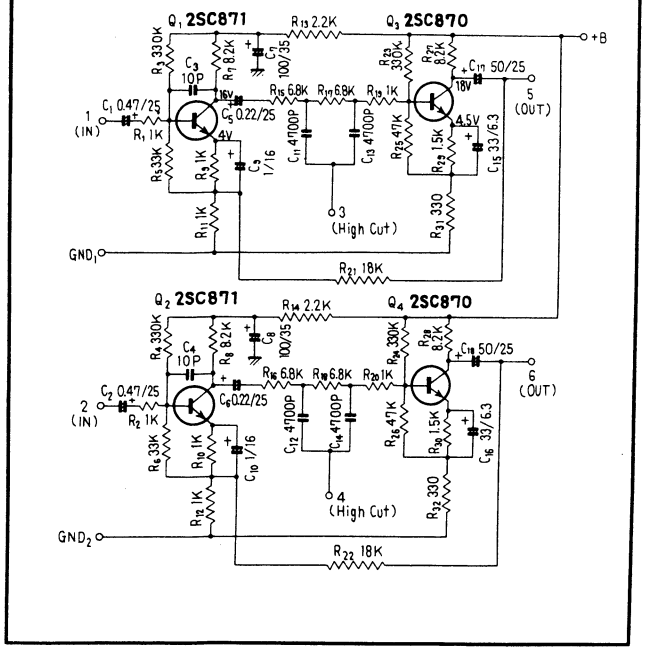
HEAD AMP UNIT

HEAD AMP UNIT
W15 – 049



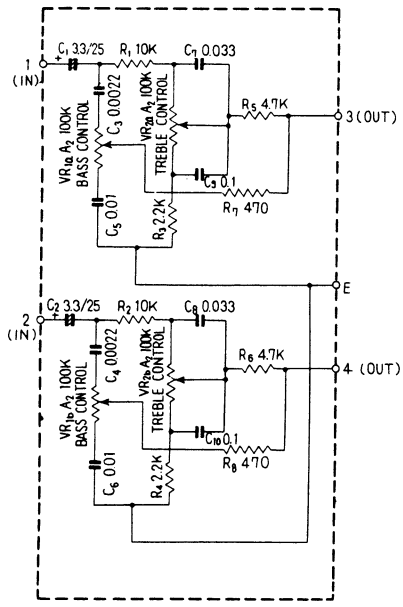
CONTROL AMP UNIT

CONTROL AMP UNIT
W15 – 079



CONTROL UNIT

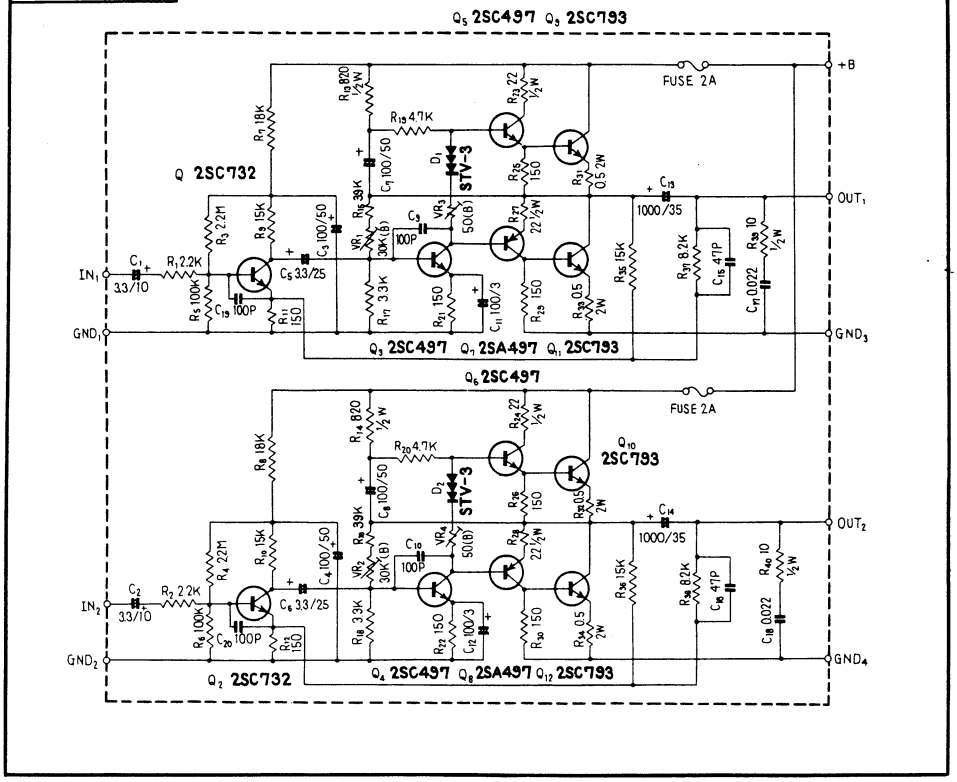
CONTROL UNIT
W15 – 080



55

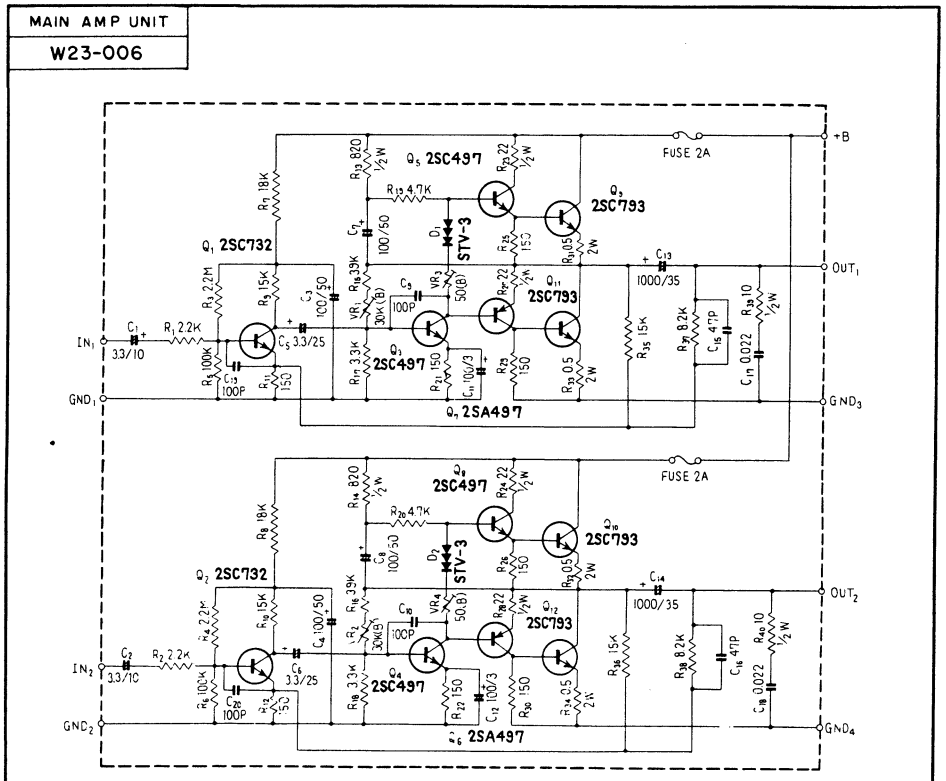
MAIN AMP UNIT

MAIN AMP UNIT
W15-060

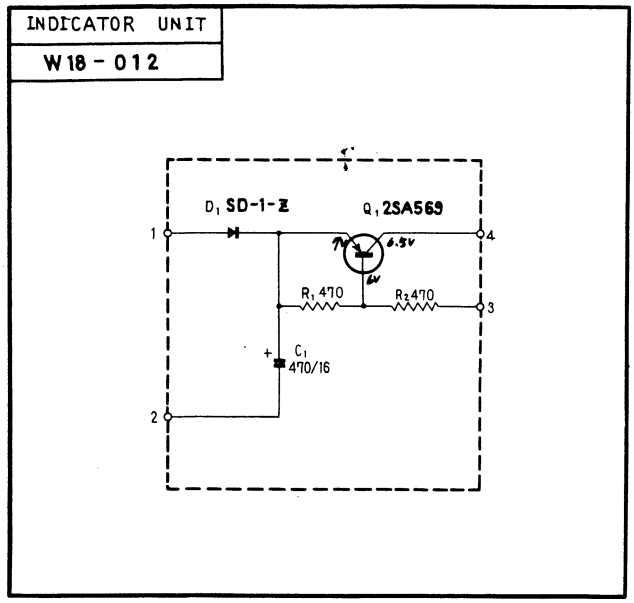


MAIN AMP UNIT for NBW model

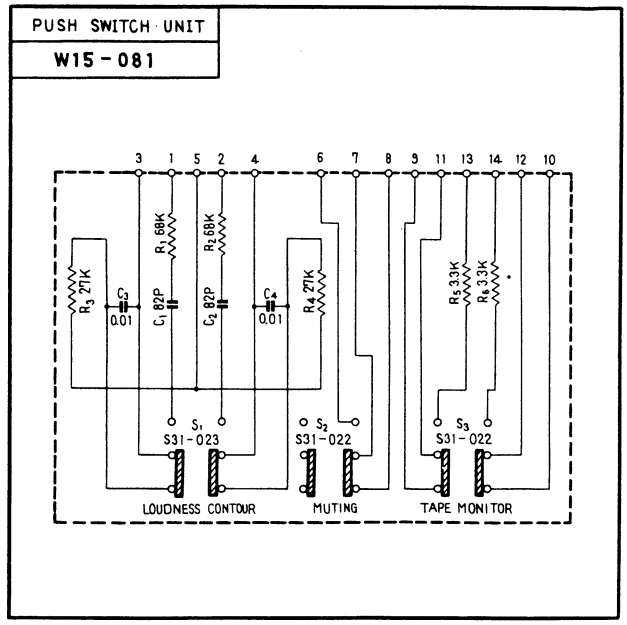
MAIN AMP UNIT
W23-006



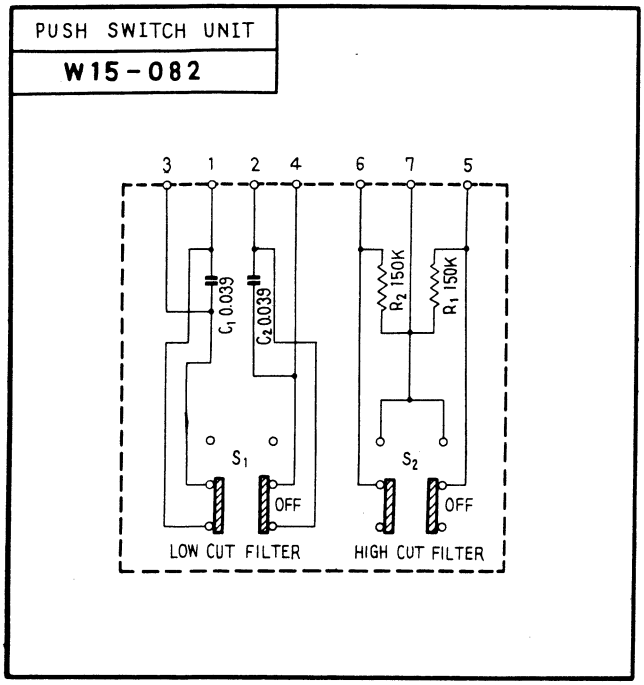
INDICATOR UNIT



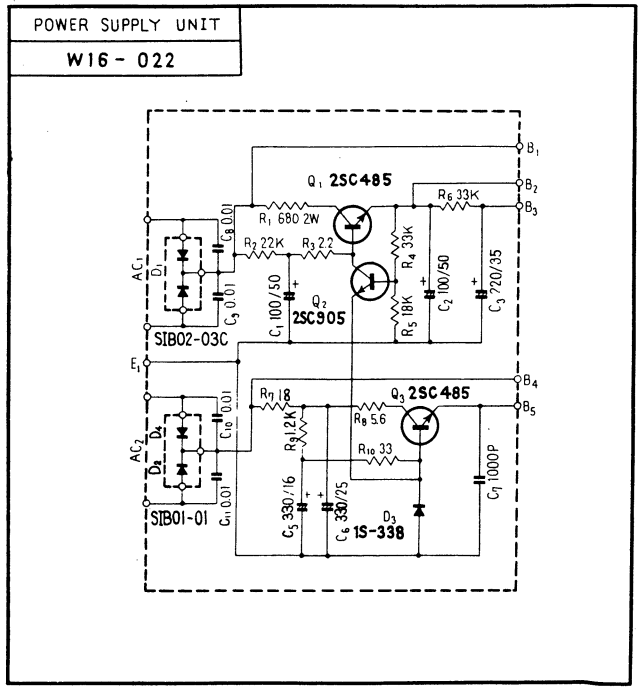
PUSH SWITCH UNIT



PUSH SWITCH UNIT

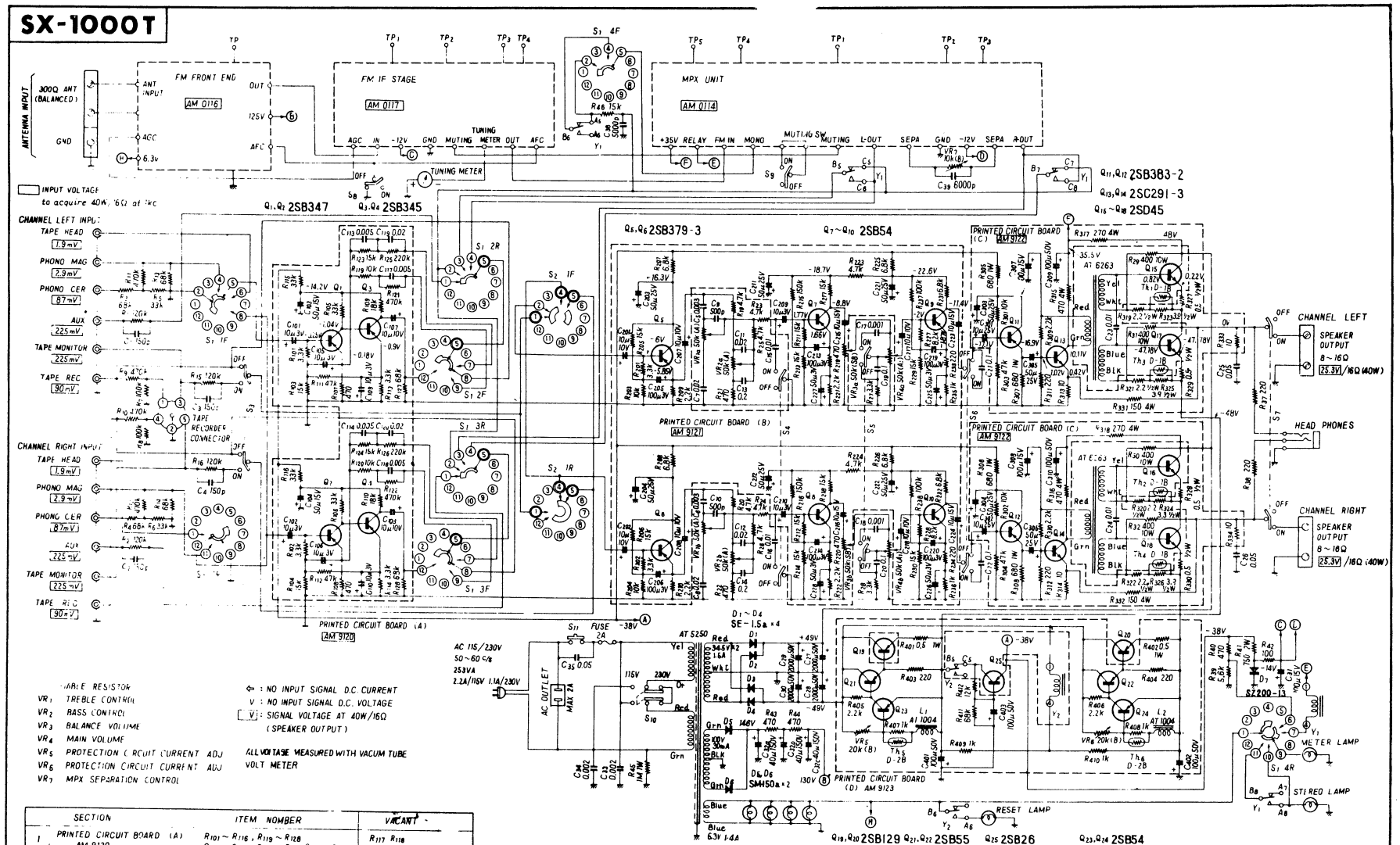


POWER SUPPLY UNIT



57

SX-1000T



VR1 TREBLE CONTROL
VR2 BASS CONTROL
VR3 BALANCE VOLUME
VR4 MAIN VOLUME
VR5 PROTECTION CIRCUIT CURRENT ADJ
VR6 PROTECTION CIRCUIT CURRENT ADJ
VR7 MPX SEPARATION CONTROL

⇦ : NO INPUT SIGNAL D.C. CURRENT
V : NO INPUT SIGNAL D.C. VOLTAGE
[V] : SIGNAL VOLTAGE AT 40W/16Ω (SPEAKER OUTPUT)

ALL VOLTAGE MEASURED WITH VACUM TUBE VOLT METER

	SECTION	ITEM NOMBER	VACANT
1	PRINTED CIRCUIT BOARD (A) AM 9120	$R_{101} \sim R_{116}$, $R_{119} \sim R_{128}$ $C_{101} \sim C_{110}$, $C_{113} \sim C_{114}$ $C_{117} \sim C_{120}$	R_{117} R_{118} C_{111} C_{112} C_{115} C_{116}
2	PRINTED CIRCUIT BOARD (B) AM 9121	$R_{201} \sim R_{238}$ $C_{201} \sim C_{228}$	
3	PRINTED CIRCUIT BOARD (C) AM 9122	$R_{301} \sim R_{334}$ $C_{301} \sim C_{310}$	
4	PRINTED CIRCUIT BOARD (D) AM 9123	$R_{401} \sim R_{412}$ $C_{401} \sim C_{403}$	
5		$R_1 \sim R_{18}$, $R_{19} \sim R_{24}$, $R_{27} \sim R_{32}$, $R_{37} \sim R_{46}$ $C_1 \sim C_{37}$	R_{17} R_{18} R_{25} R_{26} $R_{33} \sim R_{36}$

S_1 SELECTOR
(1) AUX
(2) FM MONO
(3) FM STEREO
(4) FM AUT
(5) PHONO STEREO
(6) PHONO MONO
(7) TAPE HEAD

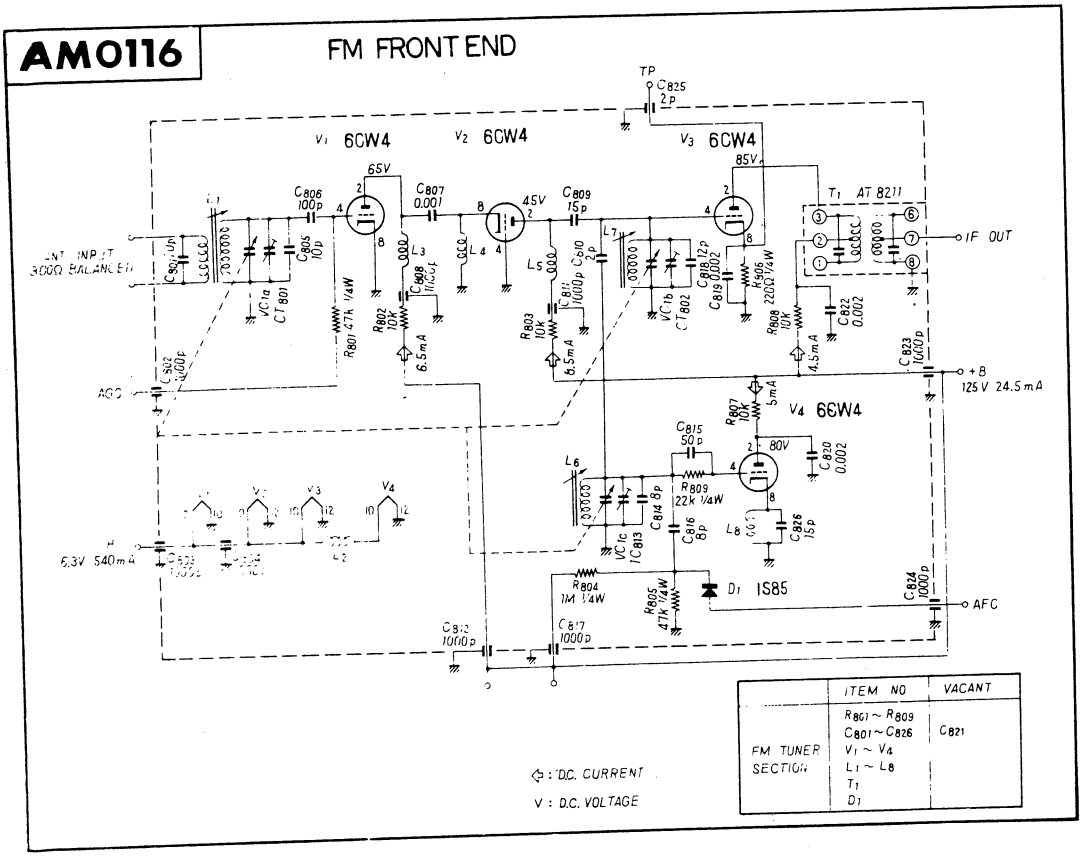
S_2 MODE SELECTOR
(1) STEREO
(2) MONO LEFT
(3) MONO RIGHT

SEESAW SWITCH
S_3 TAPE MONITOR ON ⟷ OFF
S_4 HIGH CUT FILTER ON ⟷ OFF
S_5 LOUDNESS CONTOUR ON ⟷ OFF
S_6 LOW CUT FILTER ON ⟷ OFF
S_7 SPEAKER ON ⟷ OFF
S_8 AFC ON ⟷ OFF
S_9 MUTING ON ⟷ OFF

SLIDE SWITCH
S_{10} LINE VOLTAGE 115V ⟷ 230V

PUSH SWITCH
S_{11} POWER SWITCH ON ⟷ OFF

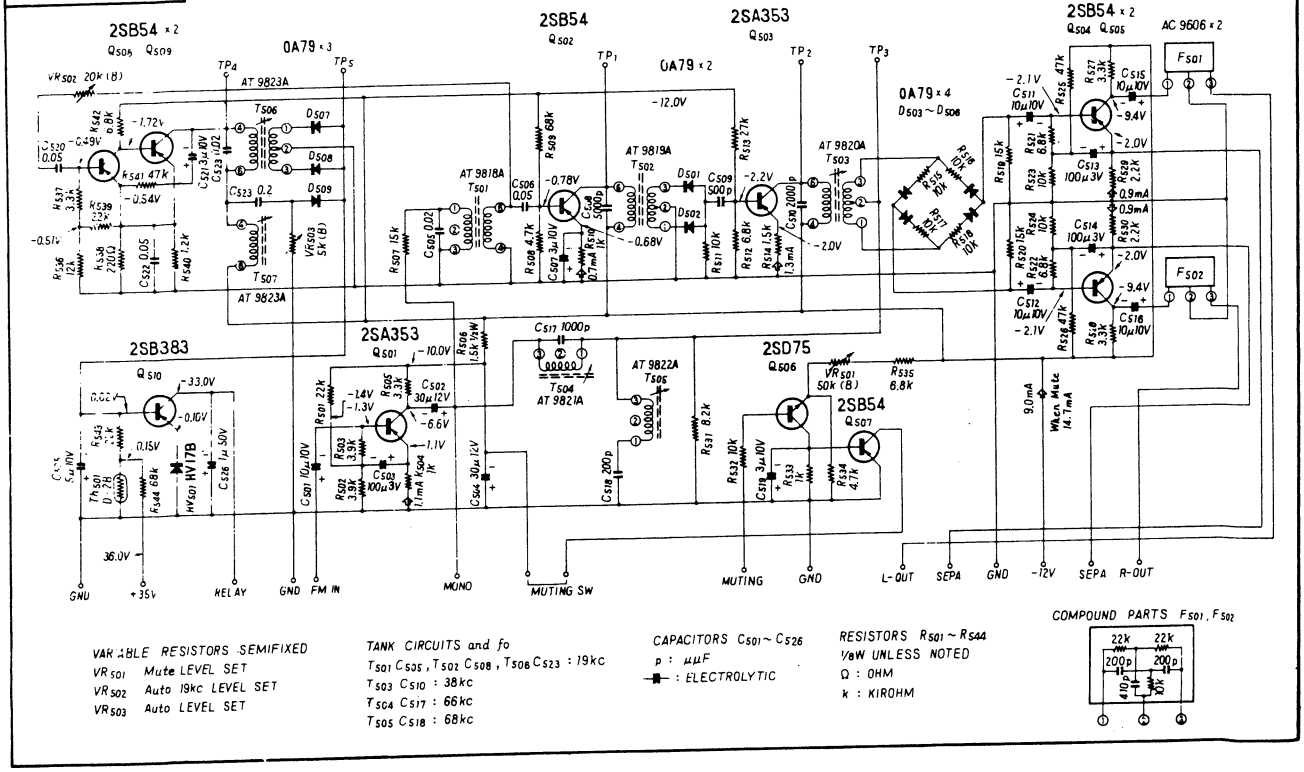
AM0116 FM FRONT END



	ITEM NO	VACANT
FM TUNER SECTION	R_{801} ~ R_{809} C_{801} ~ C_{826} V_1 ~ V_4 L_1 ~ L_8 T_1 D_1	C_{821}

⇦ : D.C. CURRENT
V : D.C. VOLTAGE

AM0114 MPX UNIT



VARIABLE RESISTORS SEMIFIXED
VR_{501} Mute LEVEL SET
VR_{502} Auto 19kc LEVEL SET
VR_{503} Auto LEVEL SET

TANK CIRCUITS and fo
T_{S01} C_{S05}, T_{S02} C_{S08}, T_{S06} C_{S23} : 19kc
T_{S03} C_{S10} : 38kc
T_{S04} C_{S17} : 66kc
T_{S05} C_{S18} : 68kc

CAPACITORS C_{501} ~ C_{526}
p : μμF
⊣⊢ : ELECTROLYTIC

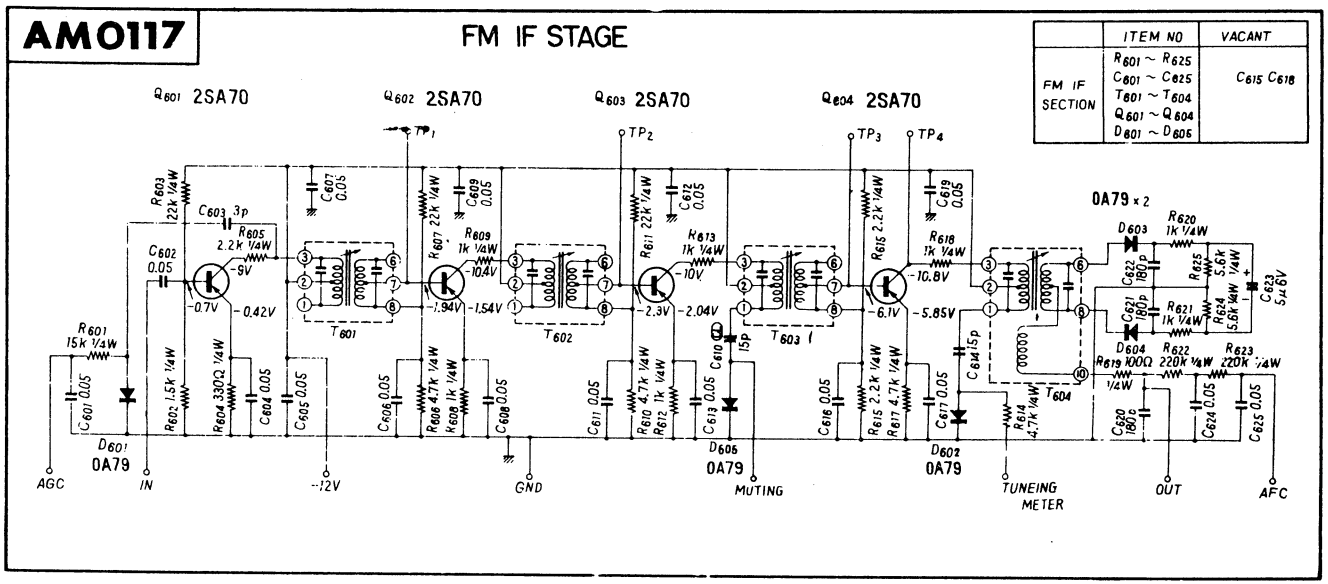
RESISTORS R_{501} ~ R_{544}
1/8W UNLESS NOTED
Ω : OHM
k : KIROHM

COMPOUND PARTS F_{S01}, F_{S02}

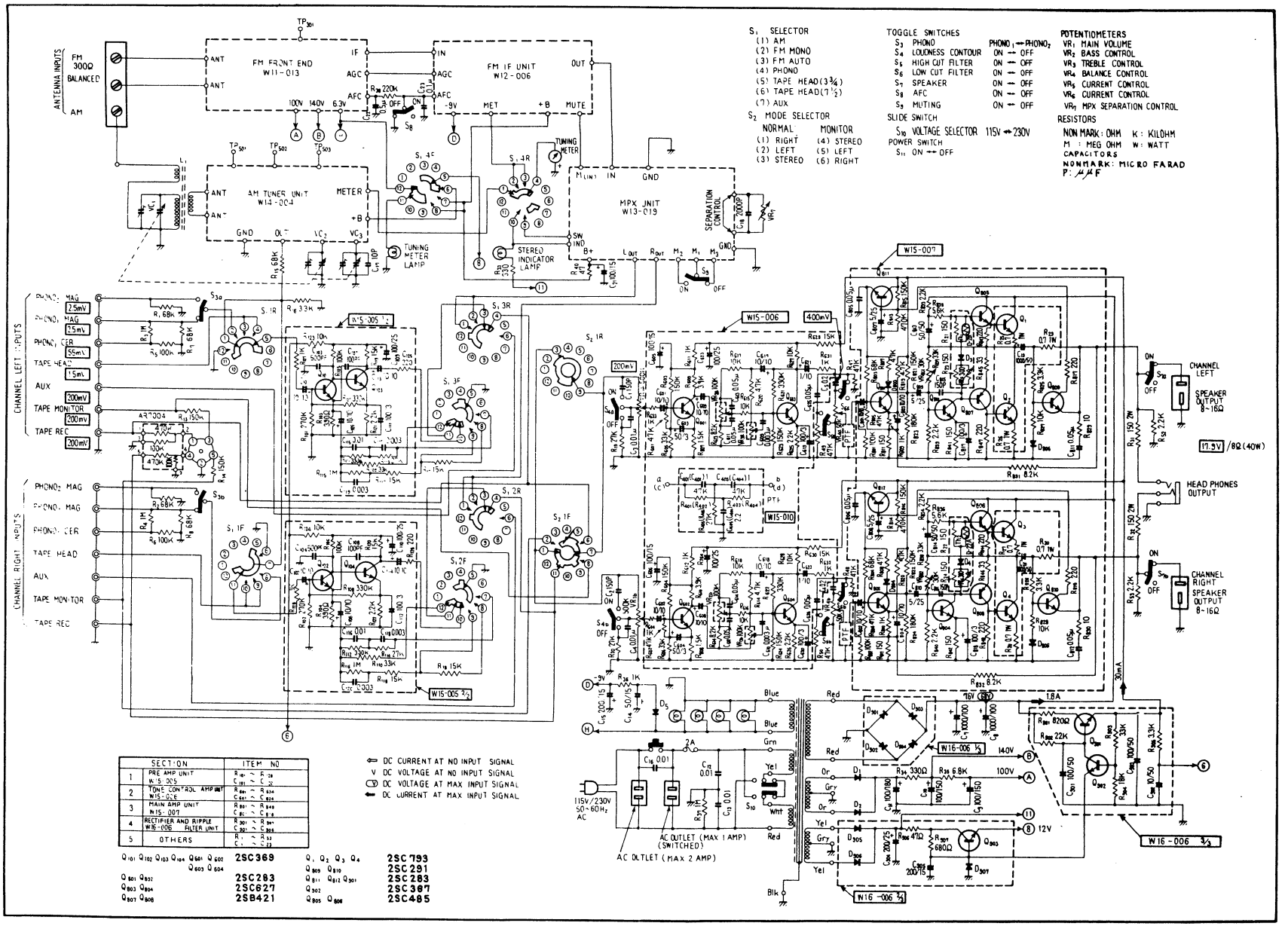
AM0117

FM IF STAGE

	ITEM NO	VACANT
FM IF SECTION	$R_{601} \sim R_{625}$ $C_{601} \sim C_{625}$ $T_{601} \sim T_{604}$ $Q_{601} \sim Q_{604}$ $D_{601} \sim D_{605}$	C_{615} C_{618}



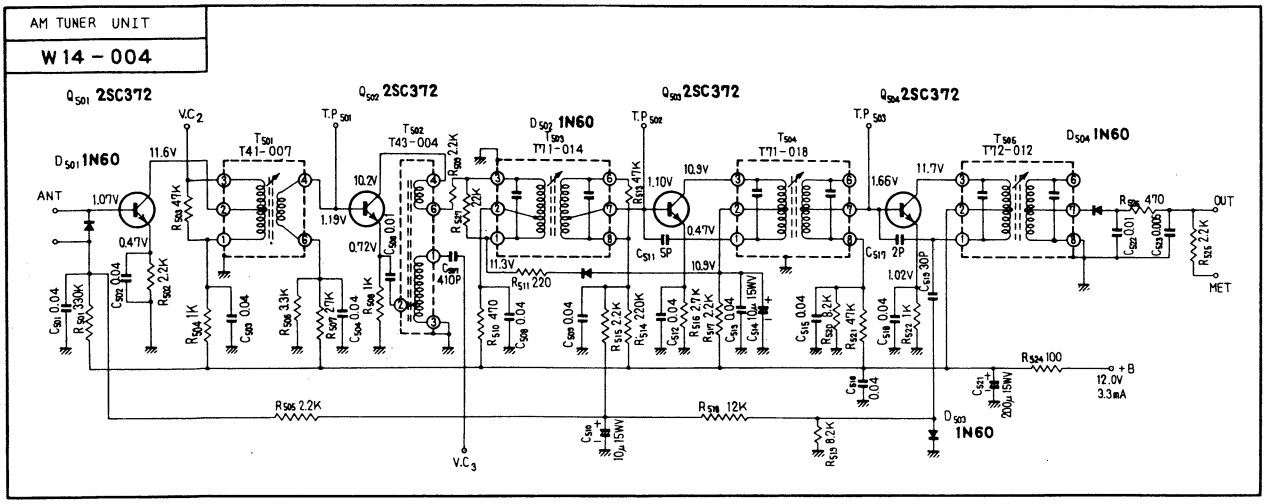
Model SX-1000TA



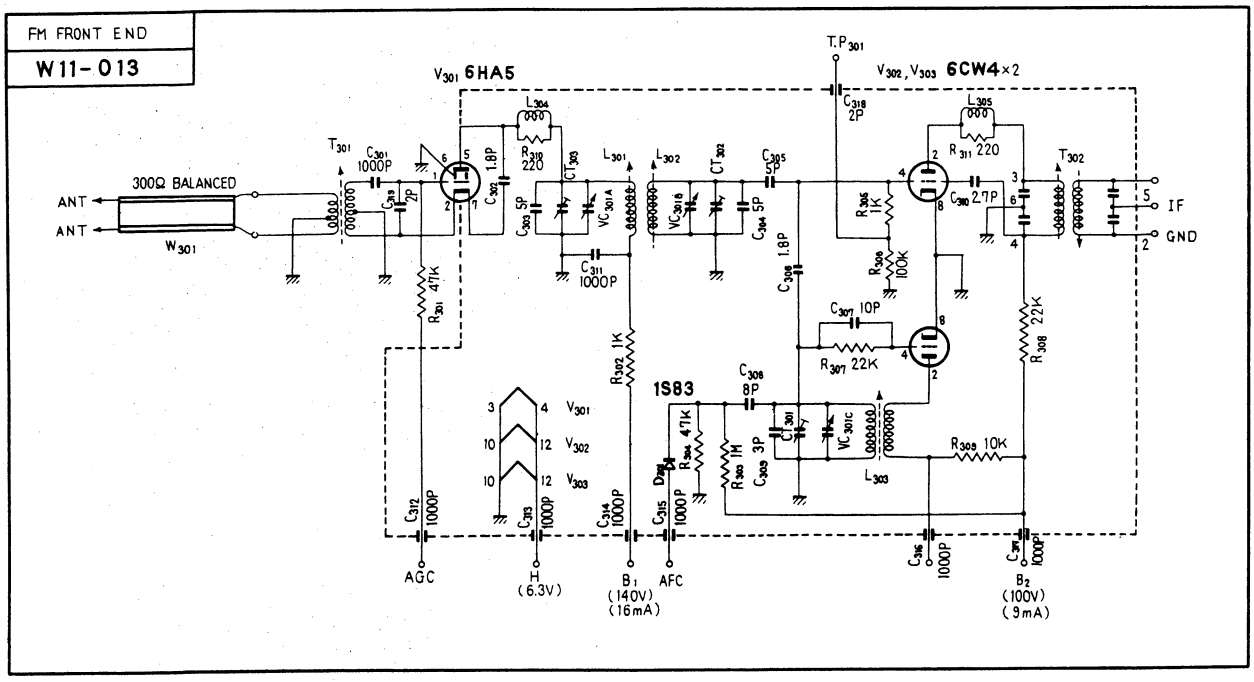
	SECTION	ITEM NO
1	PRE AMP UNIT W15-005	
2	TONE CONTROL AMP UNIT W15-006	
3	MAIN AMP UNIT W15-007	
4	RECTIFIER AND RIPPLE FILTER UNIT W16-006	
5	OTHERS	

Q_{101} Q_{102} Q_{103} Q_{104} Q_{601} Q_{602} Q_{603} Q_{604}	2SC369
Q_{801} Q_{802}	2SC283
Q_{803} Q_{804}	2SC627
Q_{807} Q_{808}	2SB421
Q_1 Q_2 Q_3 Q_4 Q_{809} Q_{810}	2SC793 2SC281
Q_{811} Q_{812} Q_{501}	2SC283
Q_{502}	2SC387
Q_{805} Q_{806}	2SC485

AM TUNER UNIT W14-004

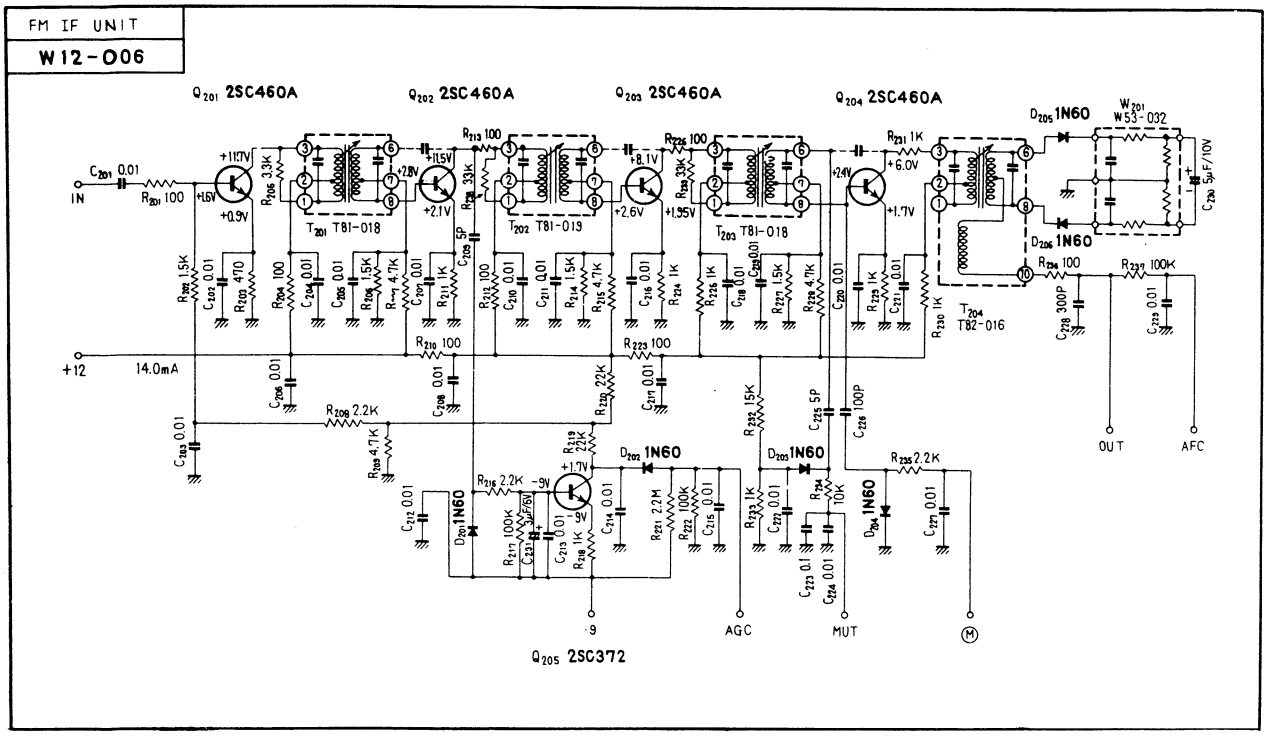


FM FRONTEND W11-013

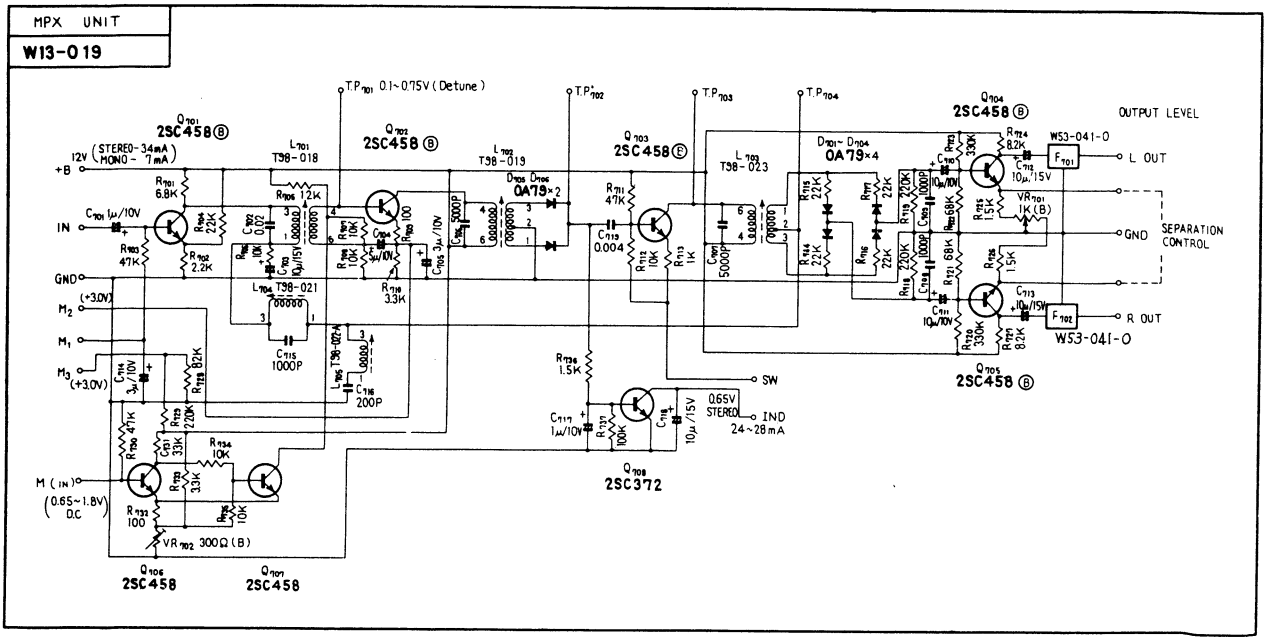


62

FM IF UNIT W12-006

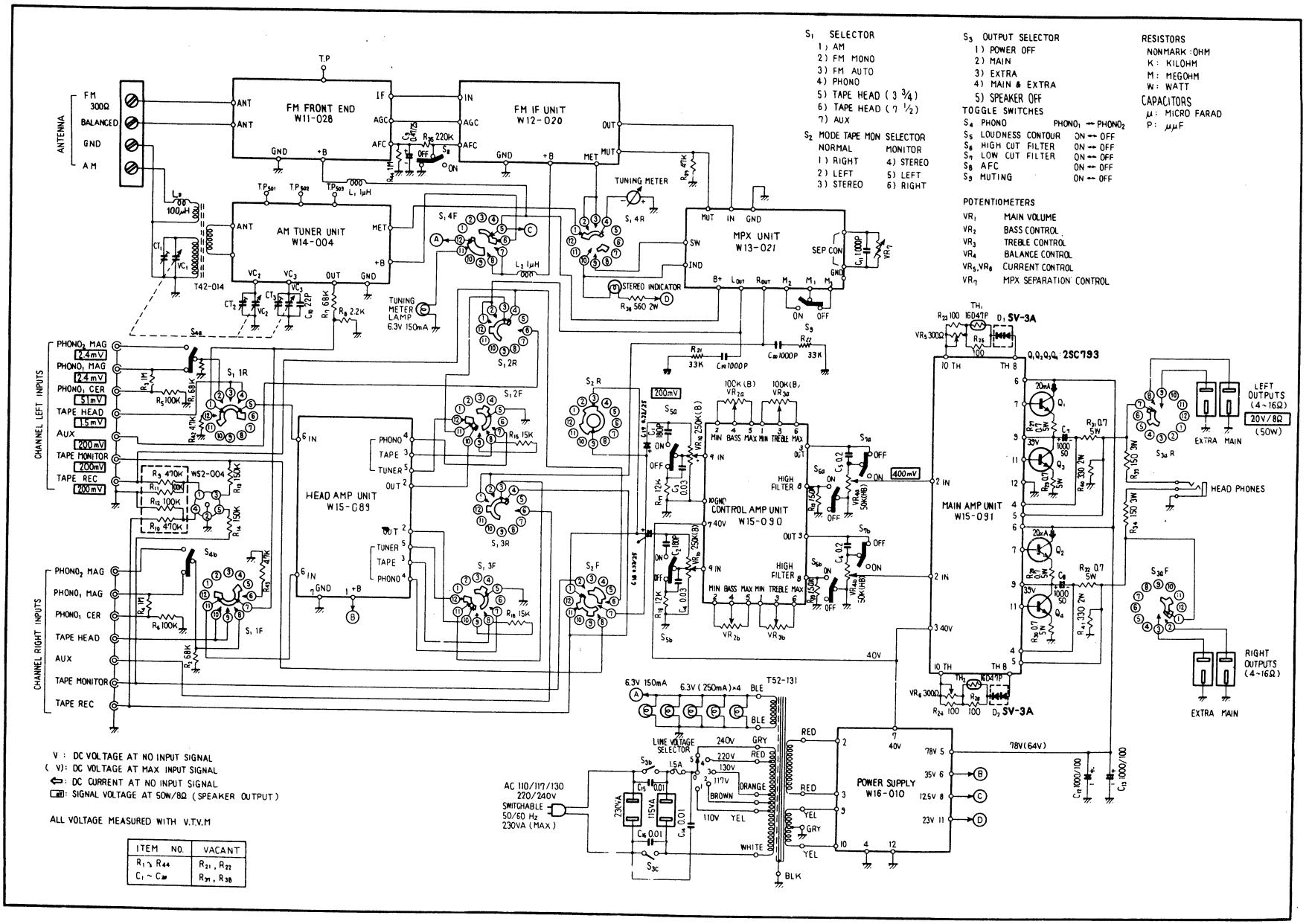


MPX UNIT W13-019



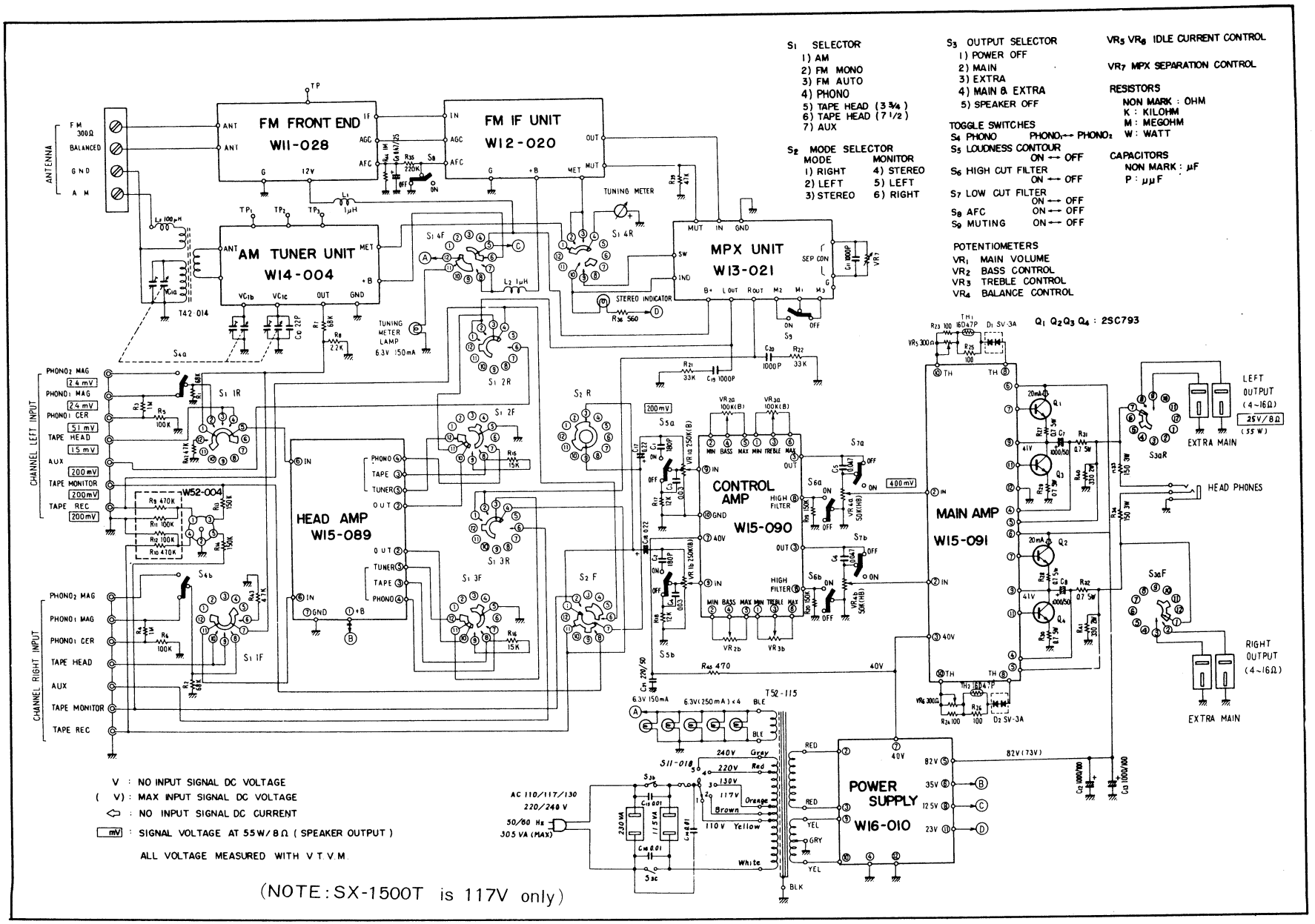
63

Model SX-1000TD(F), SX-1000TW/FW

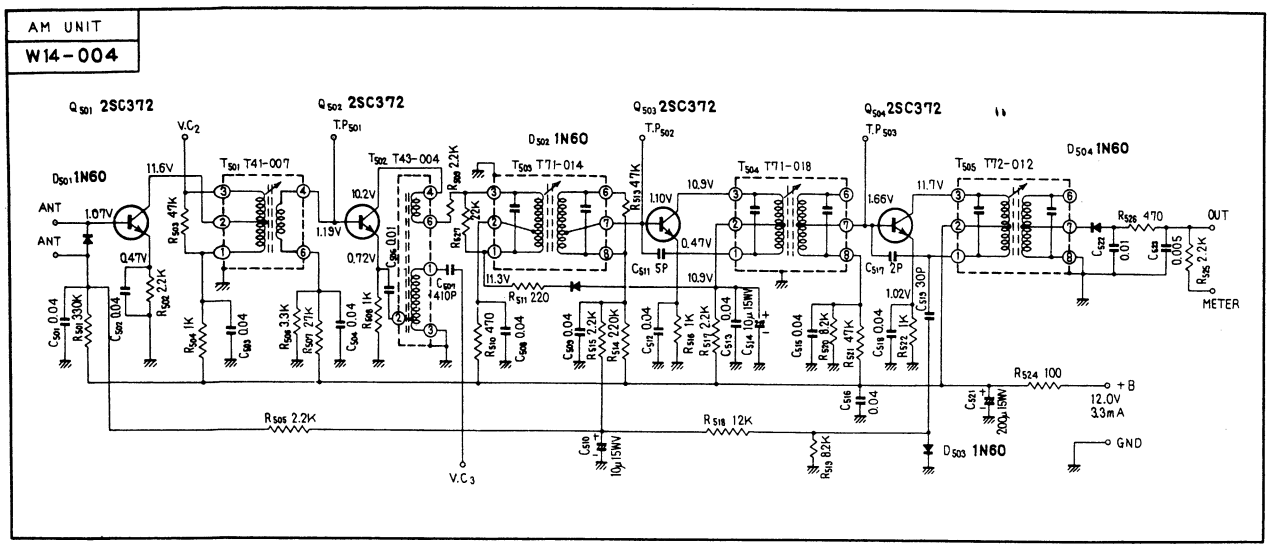


ITEM NO.	VACANT
R1 ~ R44	R21, R22
C1 ~ C38	R31, R38

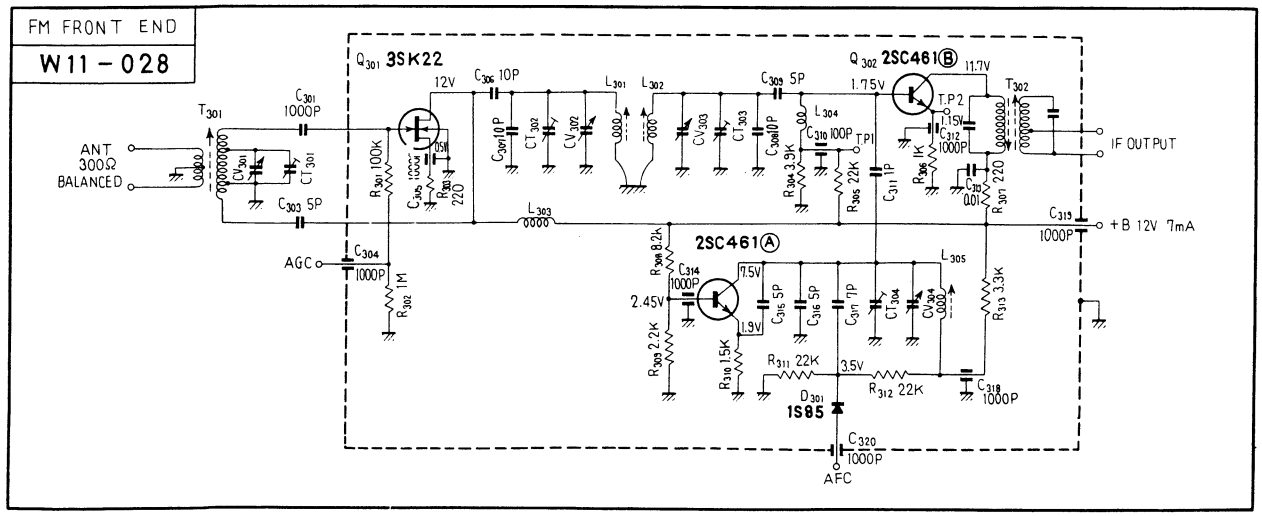
Model SX-1500T(F), SX-1500T



AM TUNER UNIT W14-004



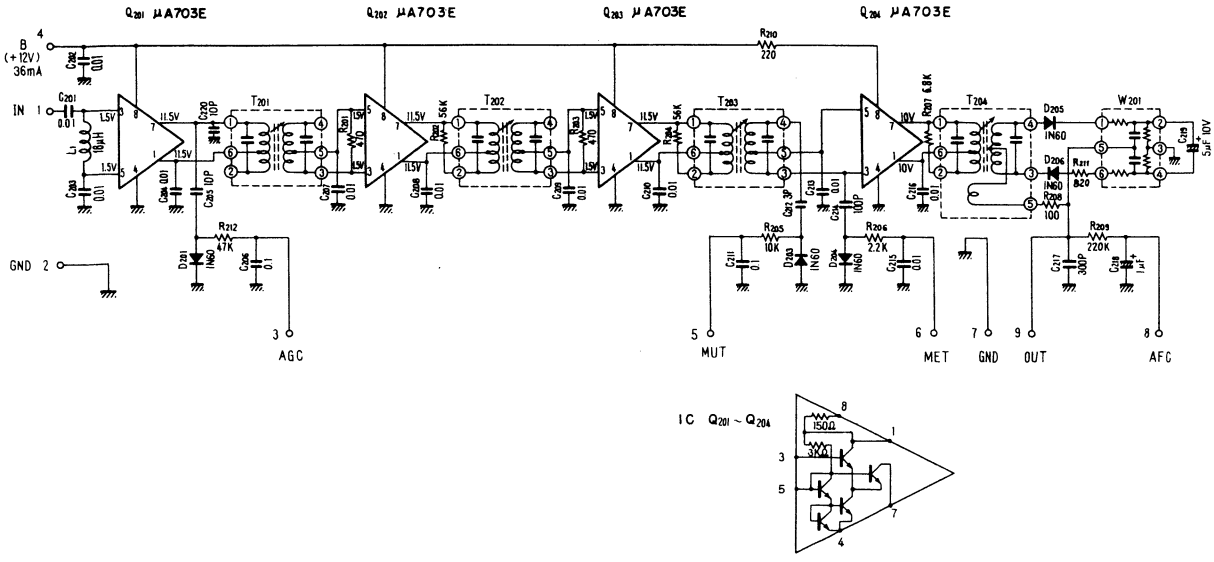
FM FRONTEND W11-028



66

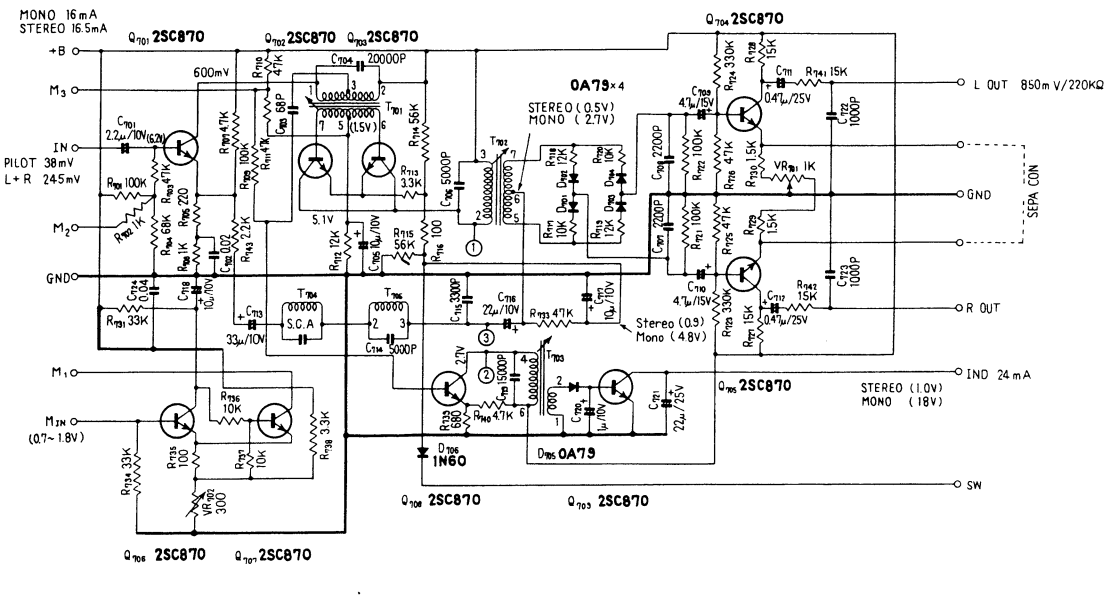
FM IF UNIT W12-020

FM IF UNIT
W12-020

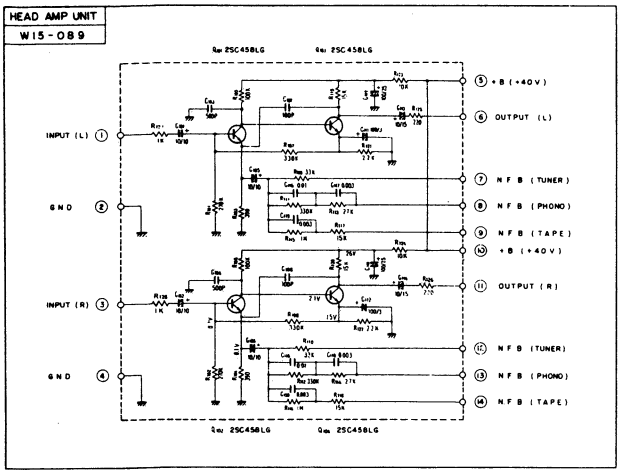


MPX UNIT W13-021

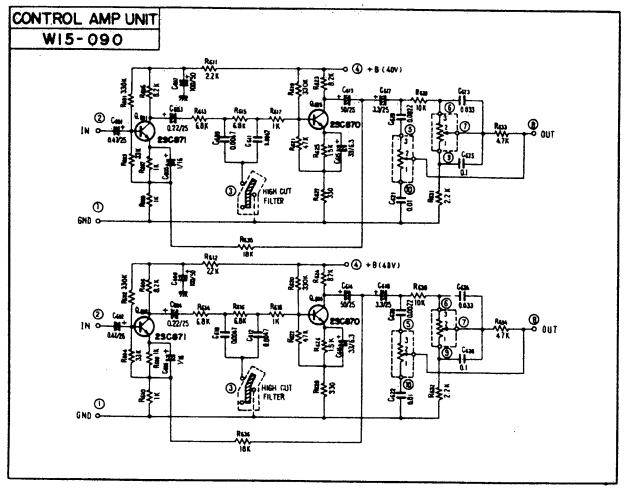
MPX UNIT
W13-021



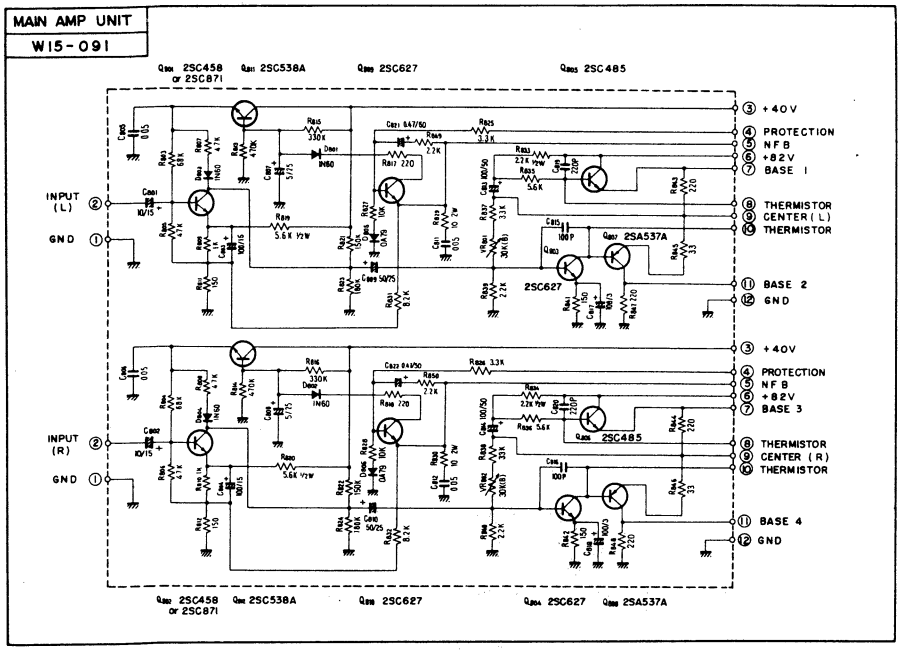
HEAD AMP UNIT W15-089



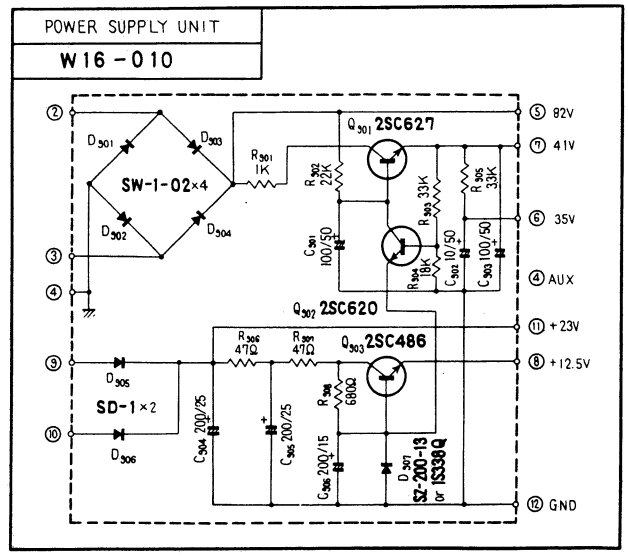
CONTROL AMP UNIT W15-090



MAIN AMP UNIT W15-091



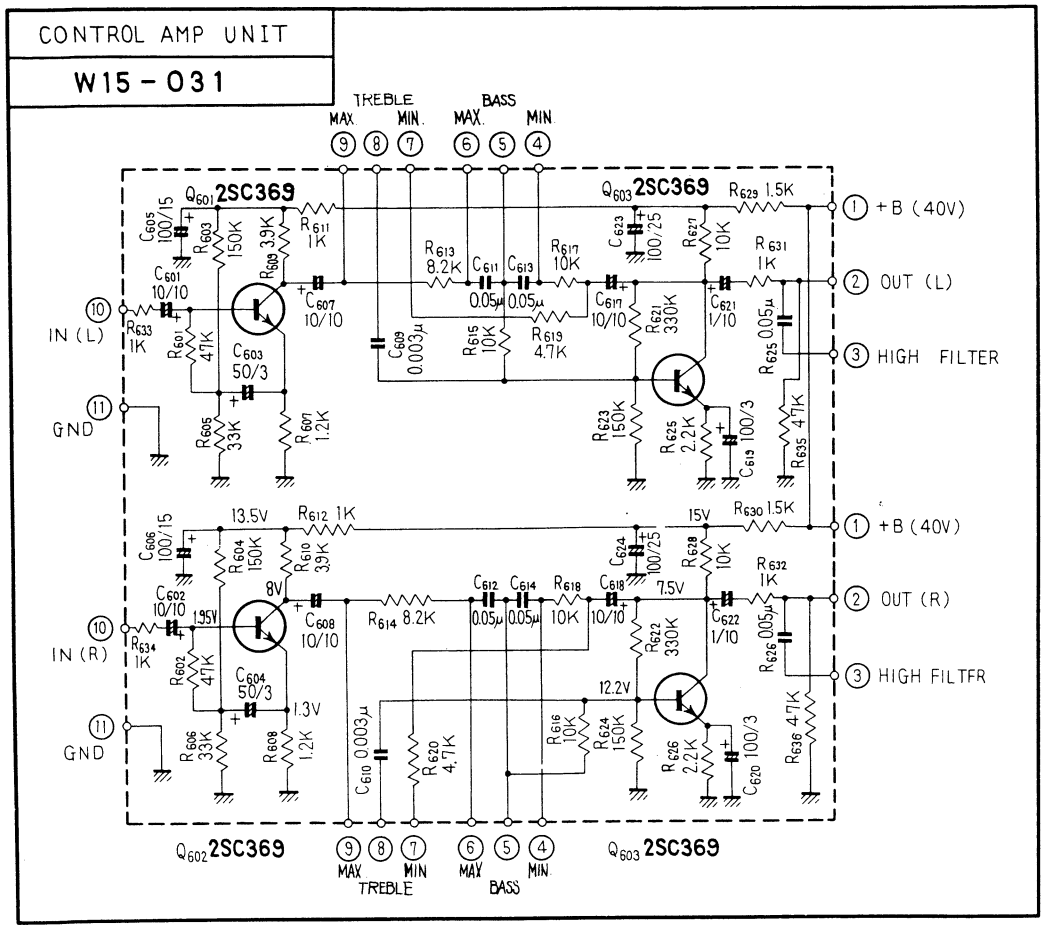
POWER SUPPLY UNIT W16-010



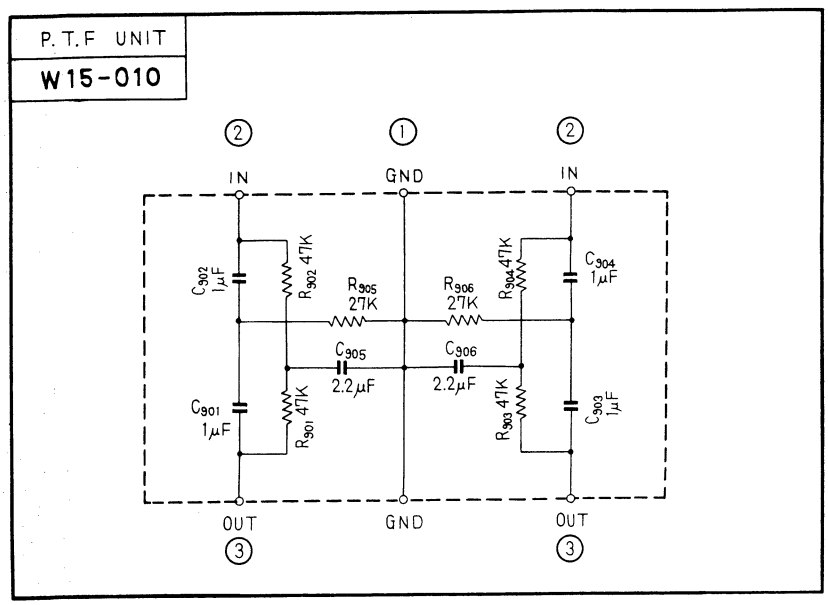
68

NOTE:
If your set is provided with the CONTROL AMP UNIT and the FILTER UNIT separately, refer to the following circuit diagrams.

CONTROL AMP UNIT W15-031

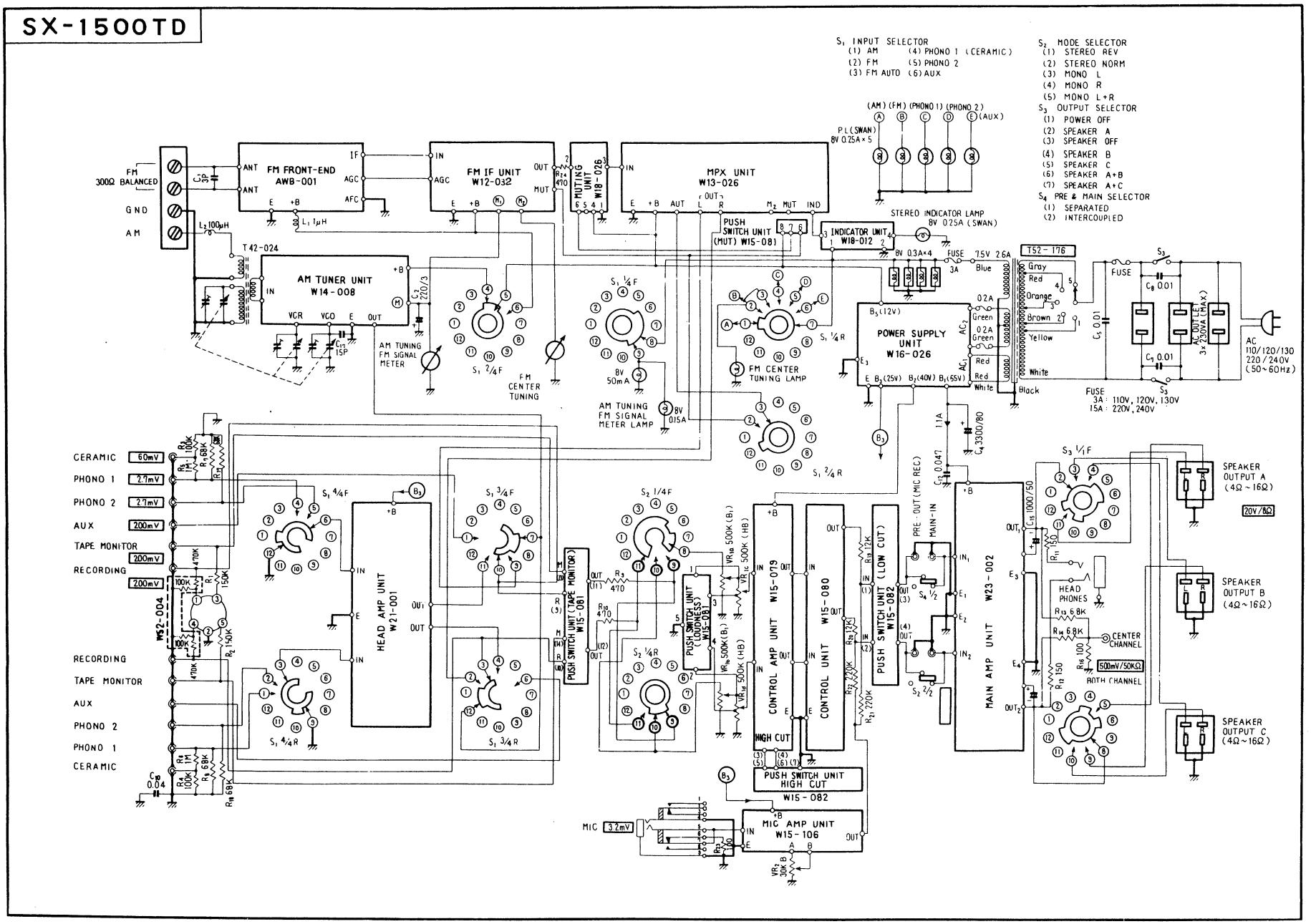


FILTER UNIT W15-010



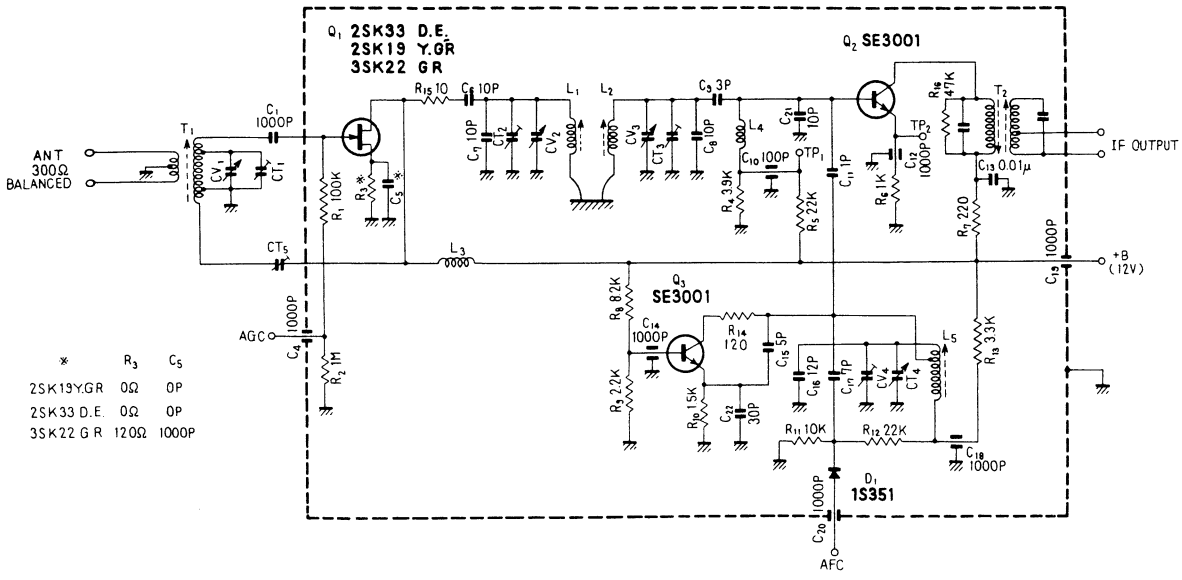
69

SX-1500TD


S1 INPUT SELECTOR
(1) AM (4) PHONO 1 (CERAMIC)
(2) FM (5) PHONO 2
(3) FM AUTO (6) AUX
S2 MODE SELECTOR
(1) STEREO REV
(2) STEREO NORM
(3) MONO L
(4) MONO R
(5) MONO L+R
S3 OUTPUT SELECTOR
(1) POWER OFF
(2) SPEAKER A
(3) SPEAKER OFF
(4) SPEAKER B
(5) SPEAKER C
(6) SPEAKER A+B
(7) SPEAKER A+C
S4 PRE & MAIN SELECTOR
(1) SEPARATED
(2) INTERCOUPLED
FM 300Ω BALANCED
GND
AM
FM FRONT-END AWB-001
FM IF UNIT W12-032
MUTING UNIT W18-026
MPX UNIT W13-026
AM TUNER UNIT W14-008
PUSH SWITCH UNIT (MUT) W15-081
INDICATOR UNIT W18-012
STEREO INDICATOR LAMP 8V 0.25A (SWAN)
POWER SUPPLY UNIT W16-026
AM TUNING FM SIGNAL METER
FM CENTER TUNING
FM CENTER TUNING LAMP
AM TUNING FM SIGNAL METER LAMP
AC 110/120/130 220/240V (50~60Hz)
FUSE 3A: 110V, 120V, 130V 15A: 220V, 240V
CERAMIC 60mV
PHONO 1 2.7mV
PHONO 2 2.7mV
AUX 200mV
TAPE MONITOR 200mV
RECORDING 200mV
HEAD AMP UNIT W21-001
PUSH SWITCH UNIT (TAPE MONITOR) W15-081
PUSH SWITCH UNIT (LOUDNESS) W15-081
CONTROL AMP UNIT W15-079
CONTROL UNIT W15-080
PUSH SWITCH UNIT (LOW CUT) W15-082
PUSH SWITCH UNIT HIGH CUT W15-082
MAIN AMP UNIT W23-002
MIC AMP UNIT W15-106
MIC 3.2mV
HEAD PHONES
CENTER CHANNEL
BOTH CHANNEL
SPEAKER OUTPUT A (4Ω~16Ω)
SPEAKER OUTPUT B (4Ω~16Ω)
SPEAKER OUTPUT C (4Ω~16Ω)

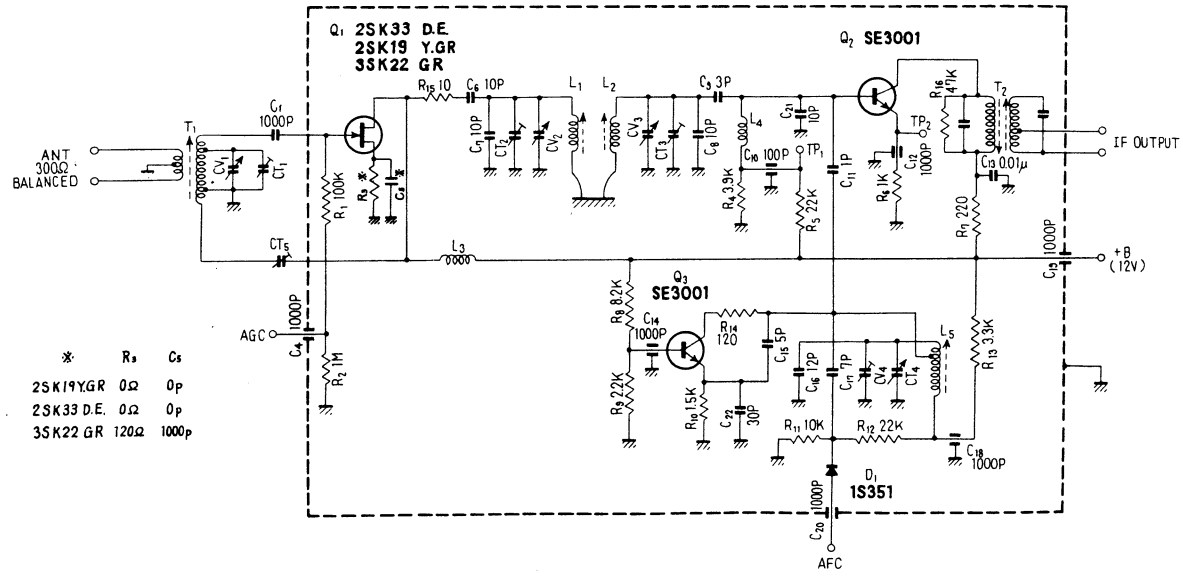
FM FRONT END

FM FRONT END
AWB-001



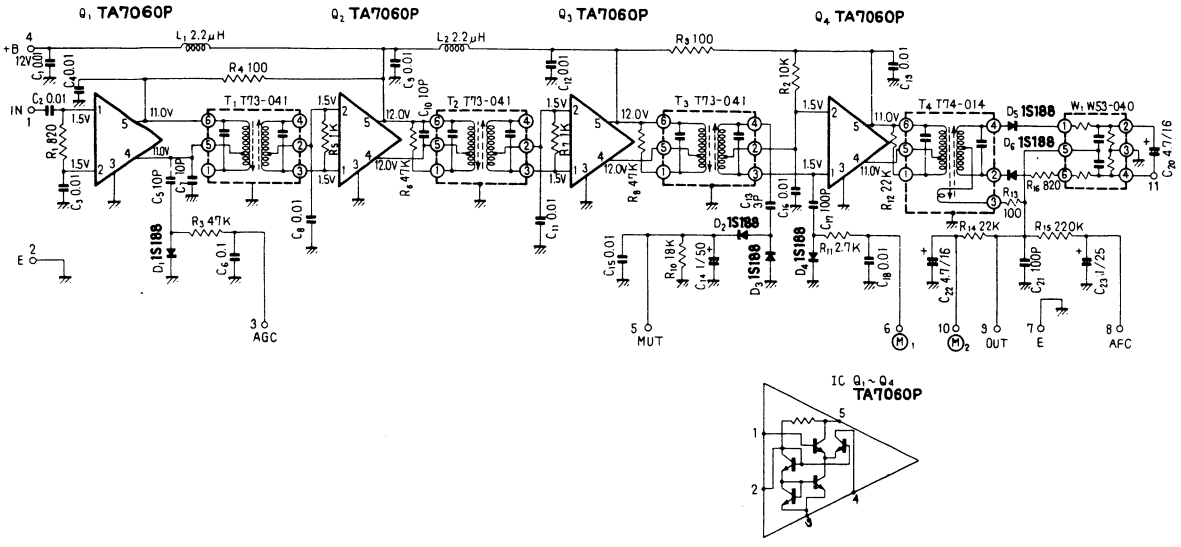
FM FRONT END for FW KLW model

FM FRONT END
W11-028



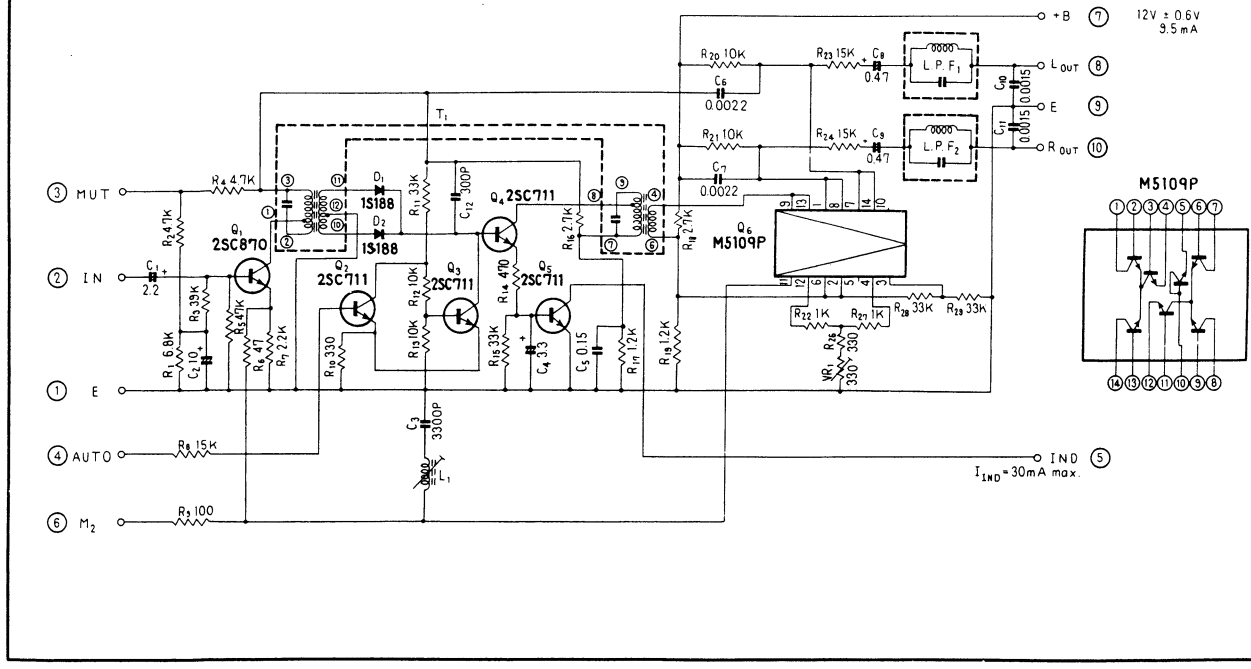
FM IF UNIT

FM IF UNIT
W12-032

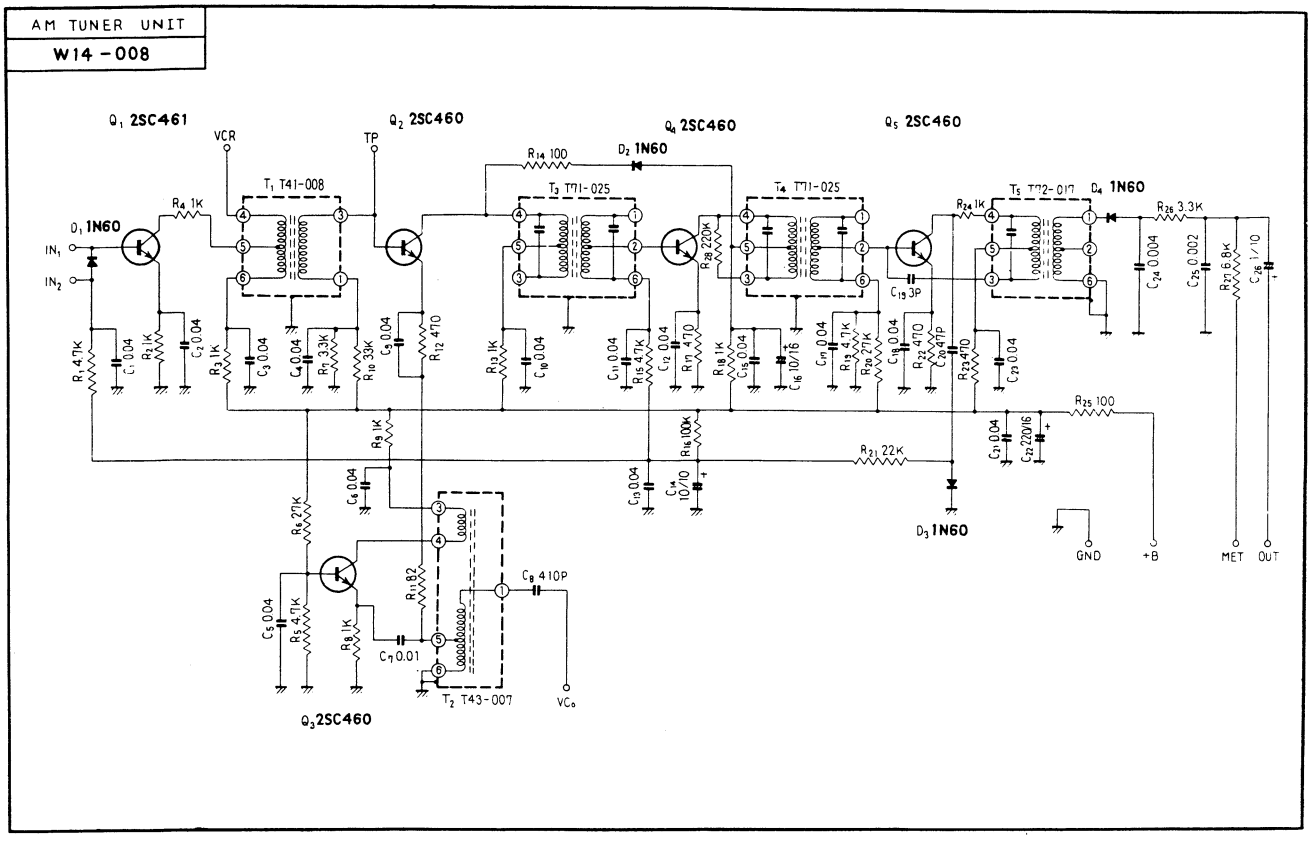


MPX UNIT

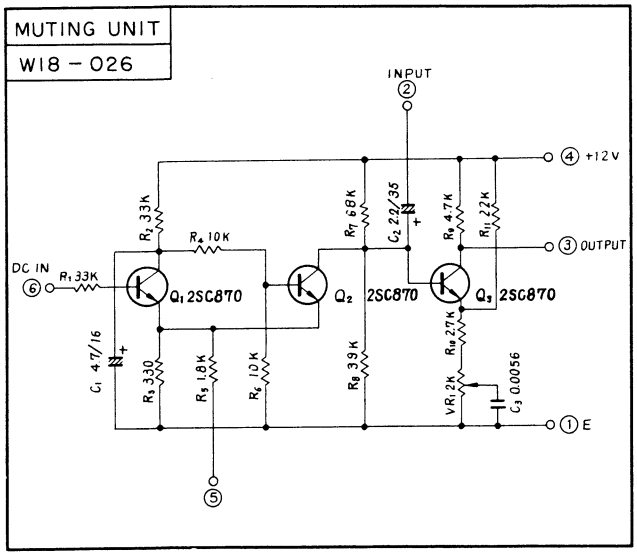
MPX UNIT
W13-026



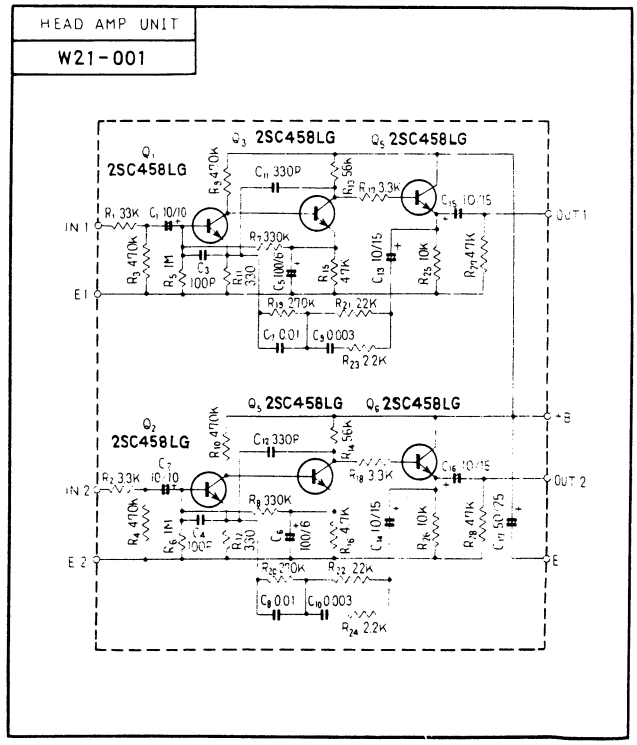
AM TUNER UNIT



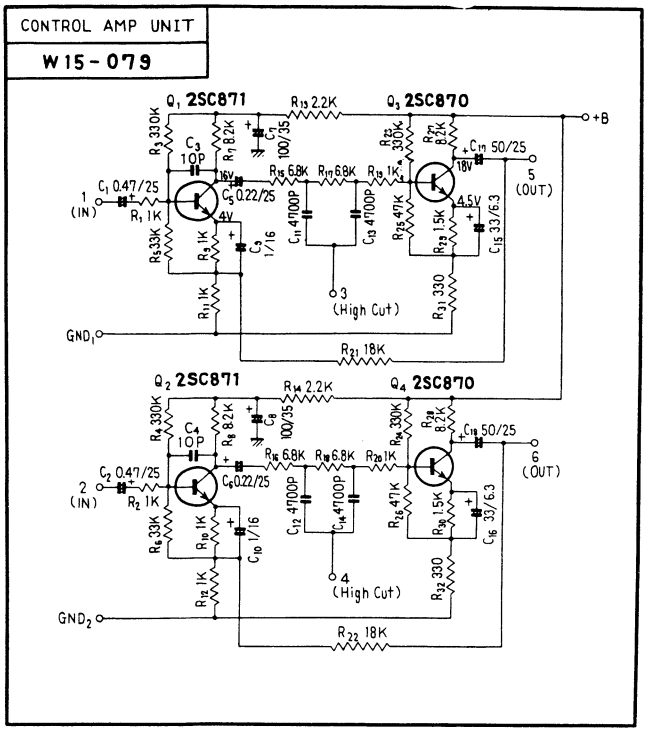
MUTING UNIT



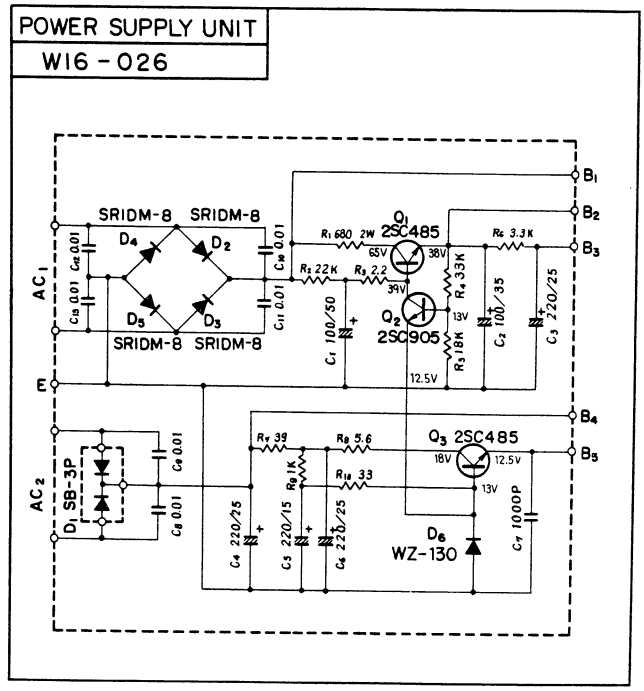
HEAD AMP UNIT



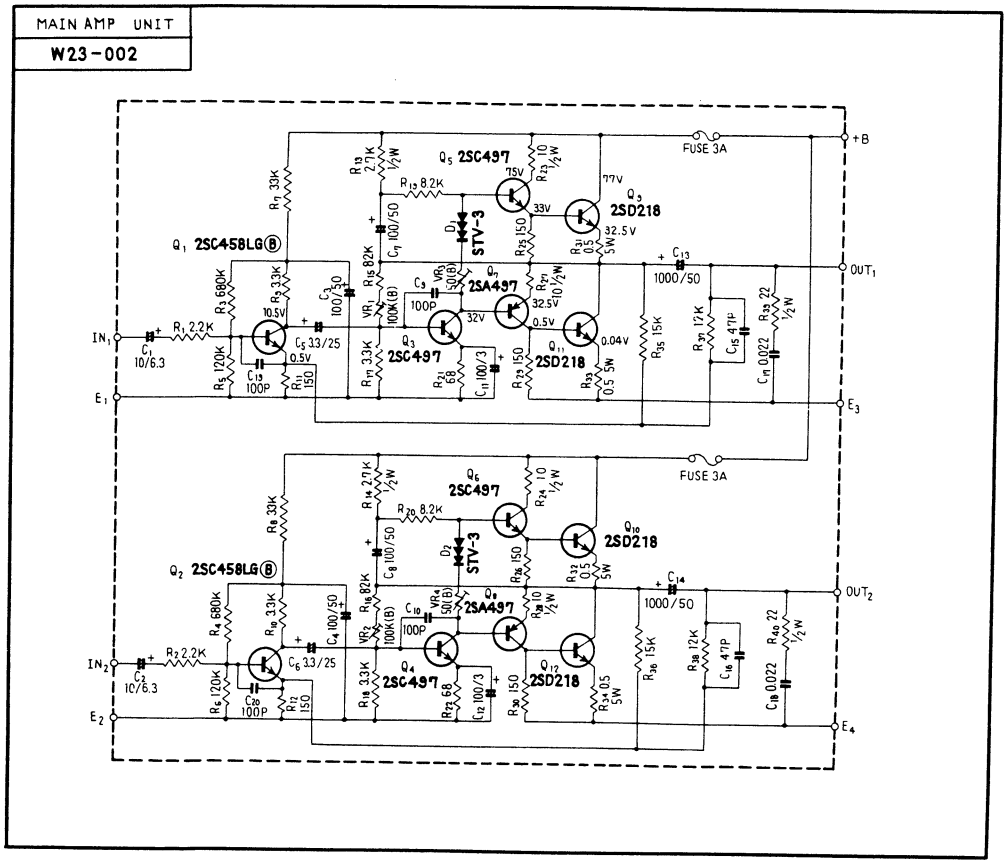
CONTROL AMP UNIT



POWER SUPPLY UNIT



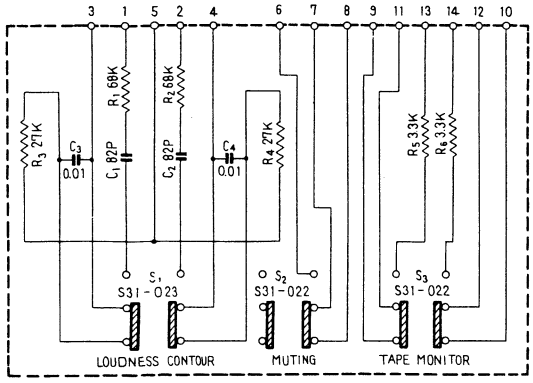
MAIN AMP UNIT



74

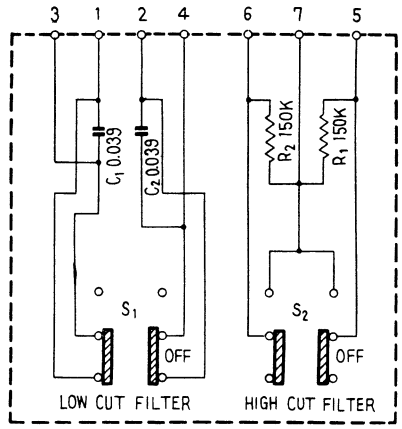
PUSH SWITCH UNIT

PUSH SWITCH UNIT
W15-081



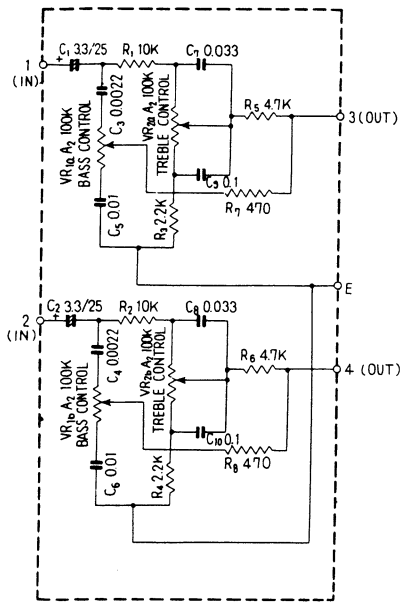
PUSH SWITCH UNIT

PUSH SWITCH UNIT
W15-082

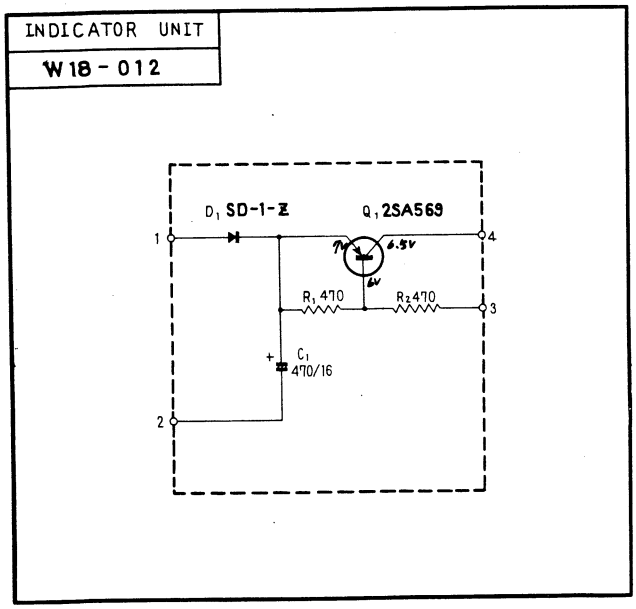


CONTROL UNIT

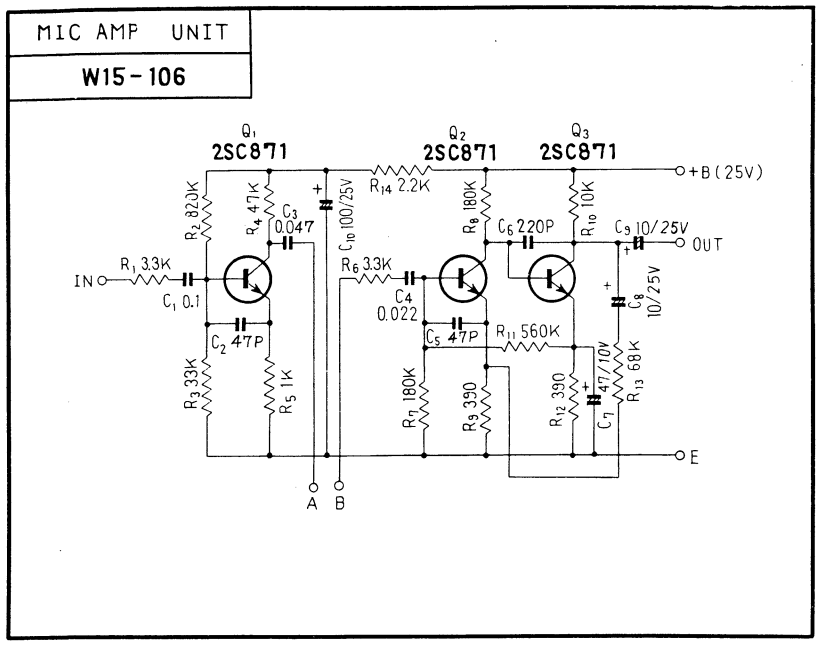
CONTROL UNIT
W15-080



INDICATOR UNIT

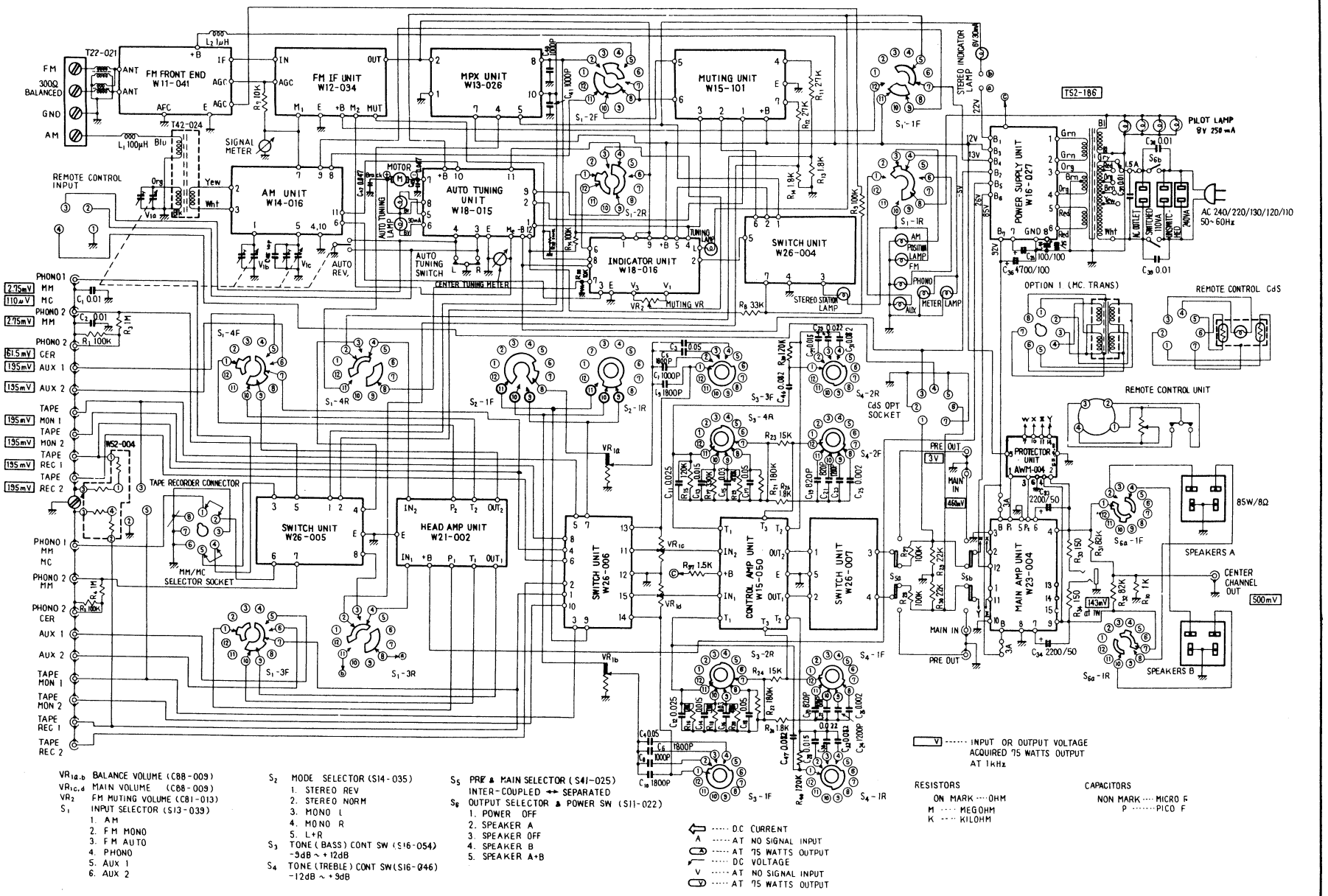


MIC AMP UNIT



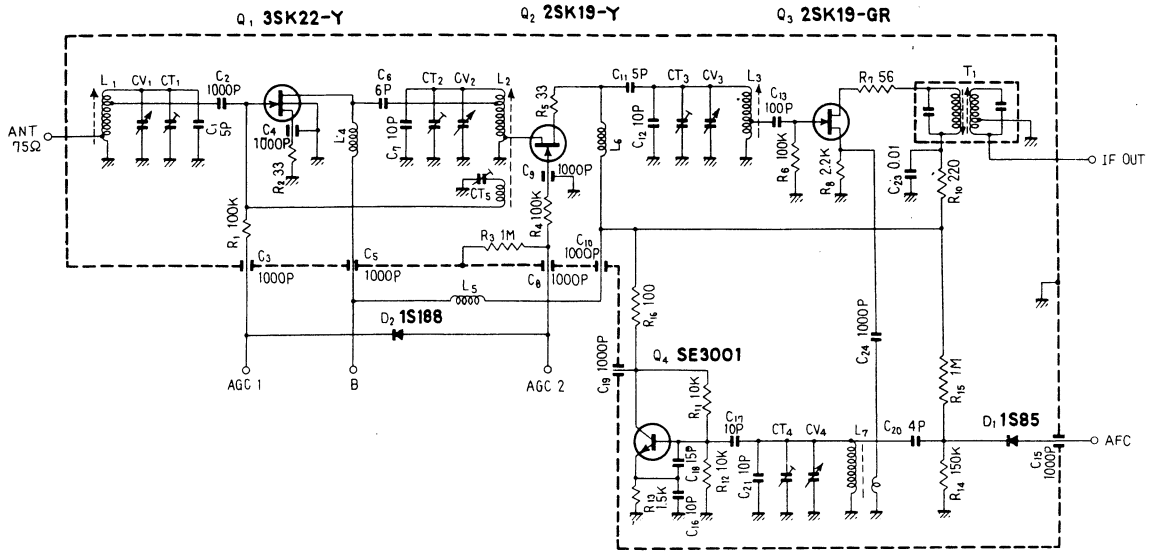
76

SX-2500


FM
300Ω BALANCED
GND
AM
T22-021
FM FRONT END W11-041
FM IF UNIT W12-034
MPX UNIT W13-026
MUTING UNIT W15-101
T42-024
SIGNAL METER
REMOTE CONTROL INPUT
AM UNIT W14-016
AUTO TUNING UNIT W18-015
AUTO TUNING SWITCH
CENTER TUNING METER
INDICATOR UNIT W18-016
MUTING VR
SWITCH UNIT W26-004
STEREO INDICATOR LAMP
STEREO STATION LAMP
POWER SUPPLY UNIT W16-027
PILOT LAMP 8V 250mA
AC 240/220/130/120/110 50~60Hz
TS2-186
OPTION 1 (MC. TRANS)
REMOTE CONTROL CdS
REMOTE CONTROL UNIT
CdS OPT SOCKET
PHONO1 MM
PHONO1 MC
PHONO 2 MM
PHONO 2 CER
AUX 1
AUX 2
TAPE MON 1
TAPE MON 2
TAPE REC 1
TAPE REC 2
W52-004
TAPE RECORDER CONNECTOR
MM/MC SELECTOR SOCKET
SWITCH UNIT W26-005
HEAD AMP UNIT W21-002
SWITCH UNIT W26-006
CONTROL AMP UNIT W15-050
SWITCH UNIT W26-007
PROTECTOR UNIT AWM-004
MAIN AMP UNIT W23-004
PRE OUT
MAIN IN
SPEAKERS A
SPEAKERS B
CENTER CHANNEL OUT
85W/8Ω
500mV
143mV at 1W
VR1a BALANCE VOLUME (C88-009)
VR1c,d MAIN VOLUME (C88-009)
VR2 FM MUTING VOLUME (C81-013)
S1 INPUT SELECTOR (S13-039)
1. AM
2. FM MONO
3. FM AUTO
4. PHONO
5. AUX 1
6. AUX 2
S2 MODE SELECTOR (S14-035)
1. STEREO REV
2. STEREO NORM
3. MONO L
4. MONO R
5. L+R
S3 TONE (BASS) CONT SW (S16-054) -9dB ~ +12dB
S4 TONE (TREBLE) CONT SW (S16-046) -12dB ~ +9dB
S5 PRE & MAIN SELECTOR (S41-025) INTER-COUPLED ↔ SEPARATED
S6 OUTPUT SELECTOR & POWER SW (S11-022)
1. POWER OFF
2. SPEAKER A
3. SPEAKER OFF
4. SPEAKER B
5. SPEAKER A+B
DC CURRENT
AT NO SIGNAL INPUT
AT 75 WATTS OUTPUT
DC VOLTAGE
AT NO SIGNAL INPUT
AT 75 WATTS OUTPUT
V ····· INPUT OR OUTPUT VOLTAGE ACQUIRED 75 WATTS OUTPUT AT 1KHz
RESISTORS
ON MARK ····OHM
M ····· MEGOHM
K ····· KILOHM
CAPACITORS
NON MARK ····· MICRO F
P ····· PICO F

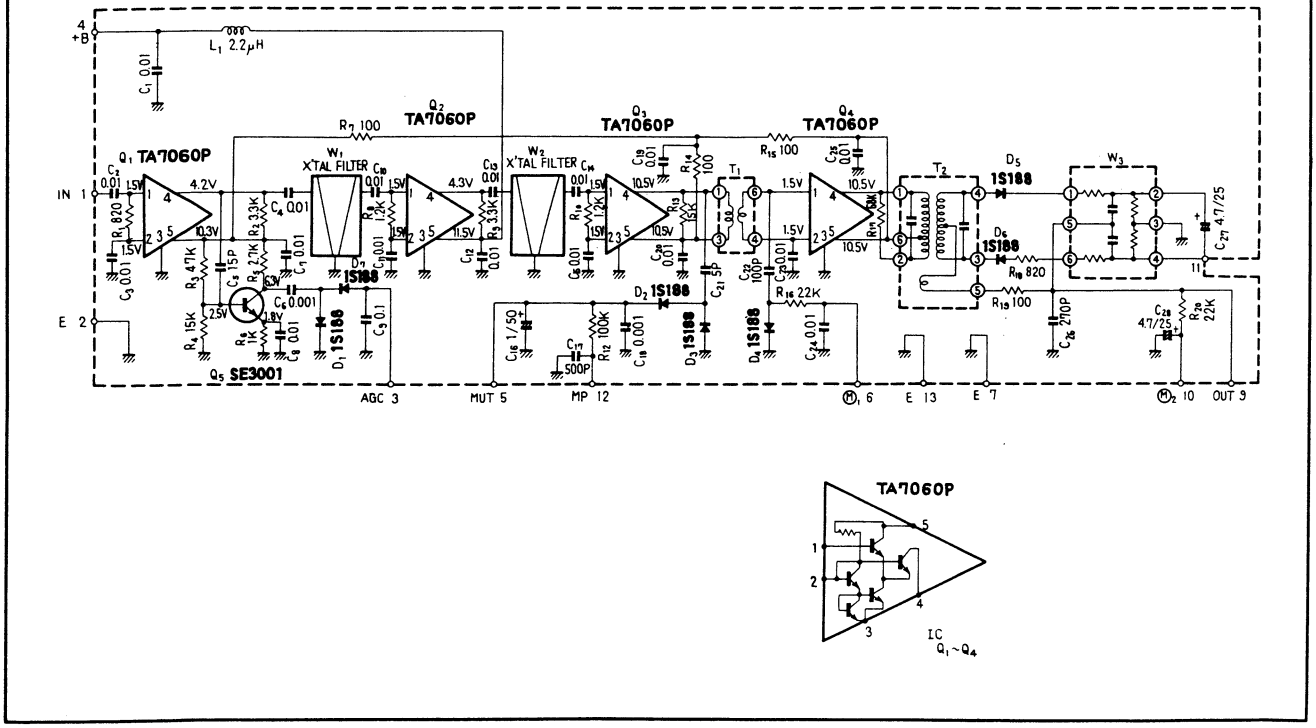
FM FRONT END

FM FRONT END
W11-041



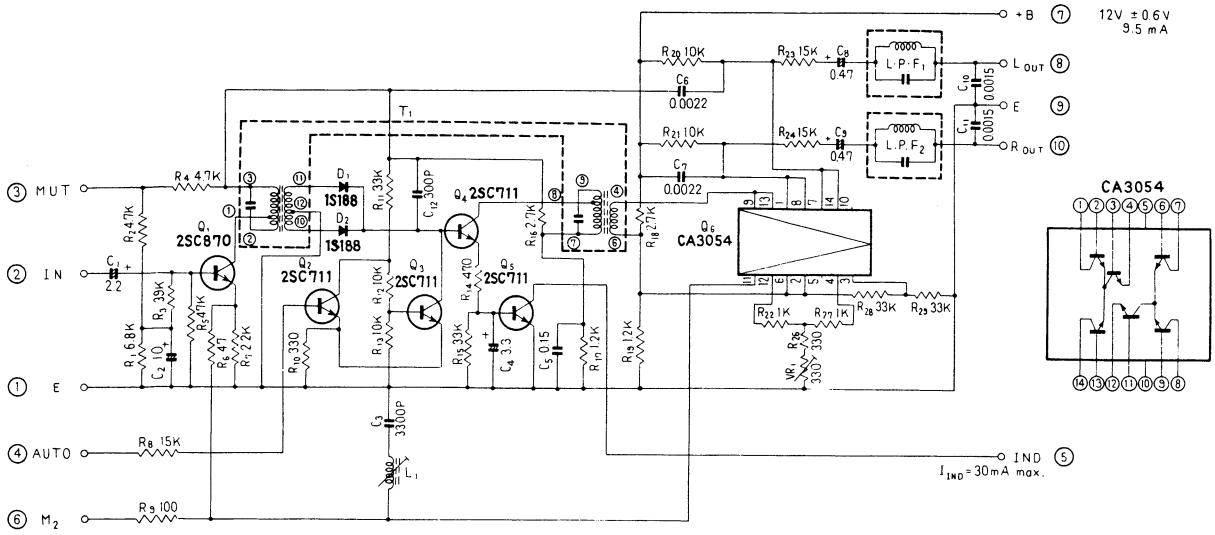
FM IF UNIT

FM IF UNIT
W12-034



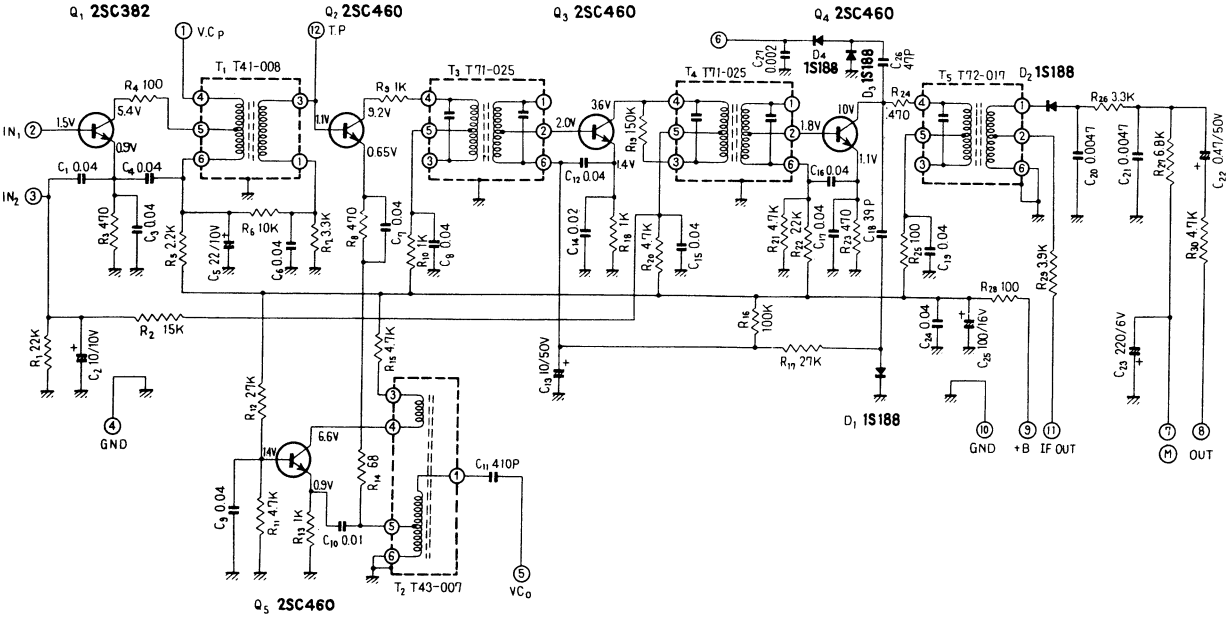
MPX UNIT

MPX UNIT
W13-026



AM TUNER UNIT

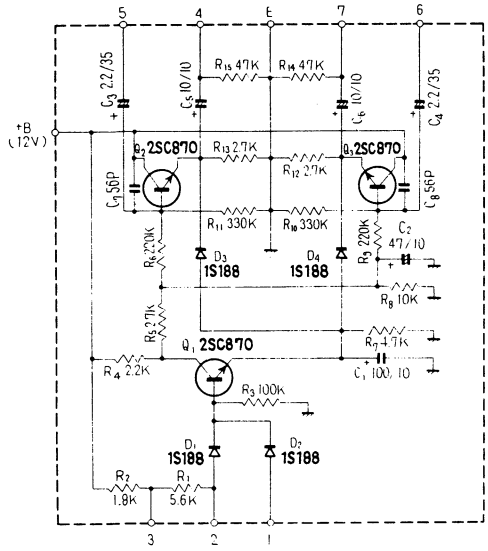
AM TUNER UNIT
W14-016



79

MUTING UNIT

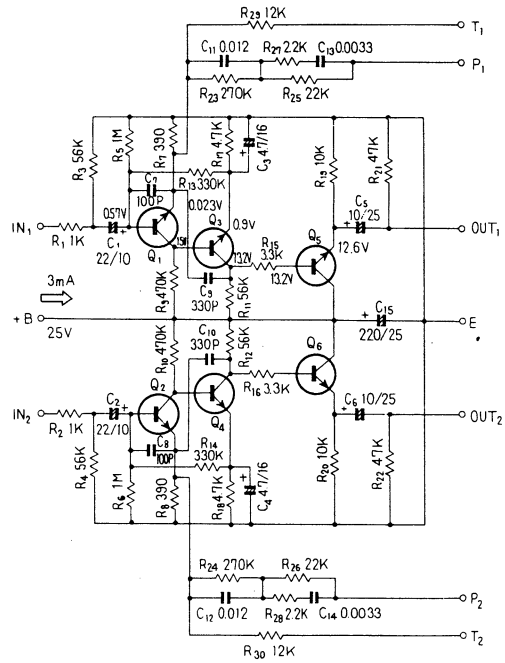
MUTING UNIT
W15-101



HEAD AMP UNIT

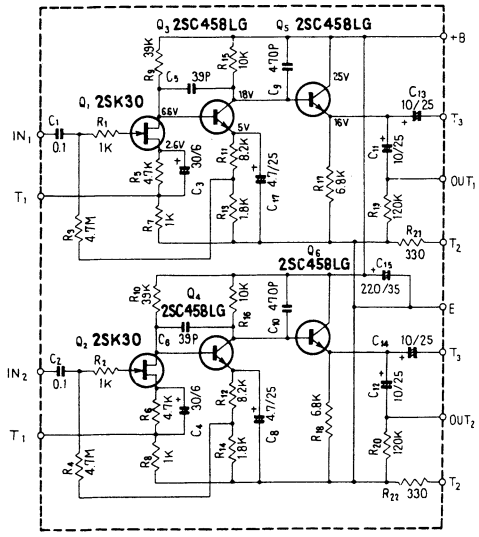
HEAD AMP UNIT
W21-002

Q1~Q6 2SC871 or 2SC458LG



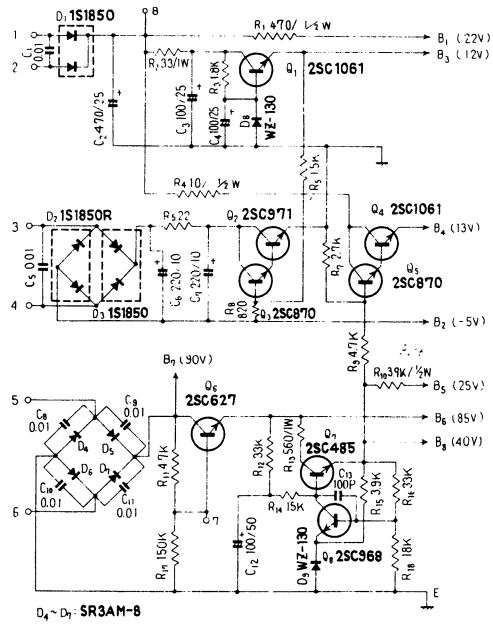
CONTROL AMP UNIT

CONTROL AMP UNIT
W15-050



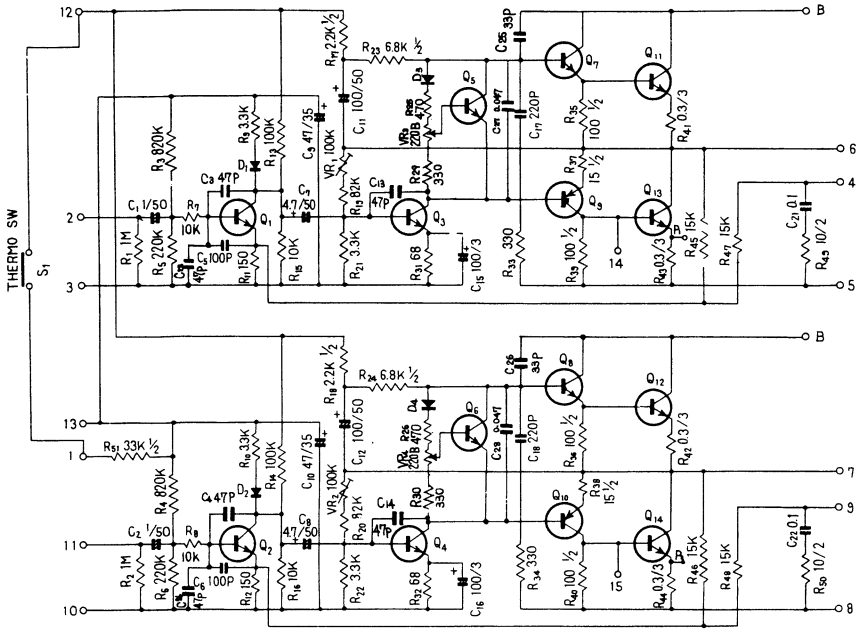
POWER SUPPLY UNIT

POWER SUPPLY UNIT
W16-027



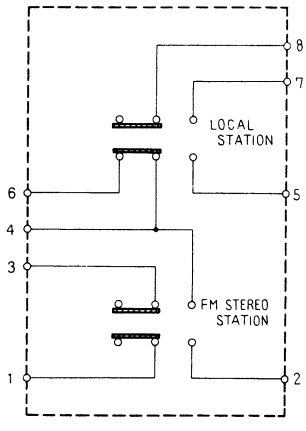
MAIN AMP UNIT

MAIN AMP UNIT
W23-004



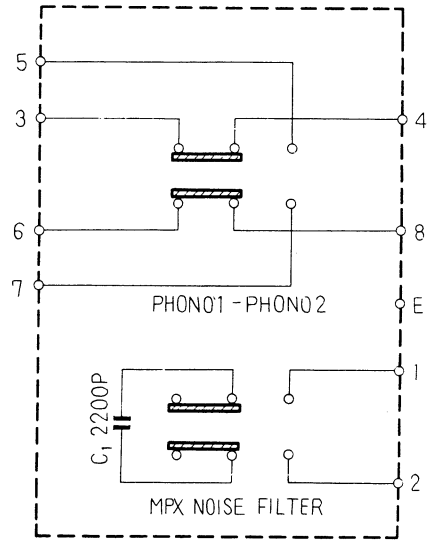
SWITCH UNIT

SWITCH UNIT
W26-004



SWITCH UNIT

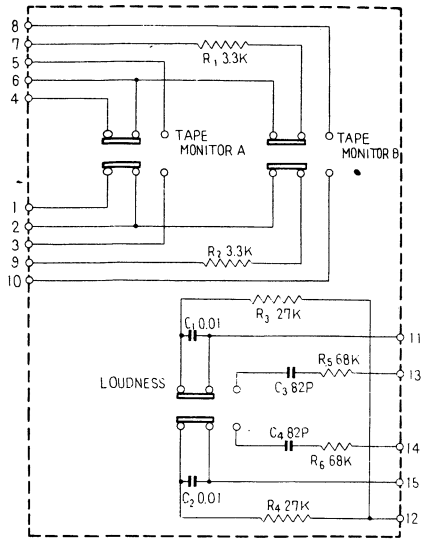
SWITCH UNIT
W26-005



81

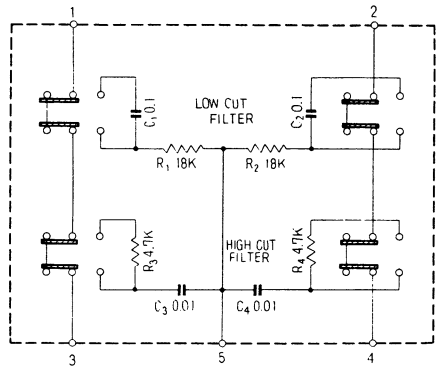
SWITCH UNIT

SWITCH UNIT
W26 - 006



SWITCH UNIT

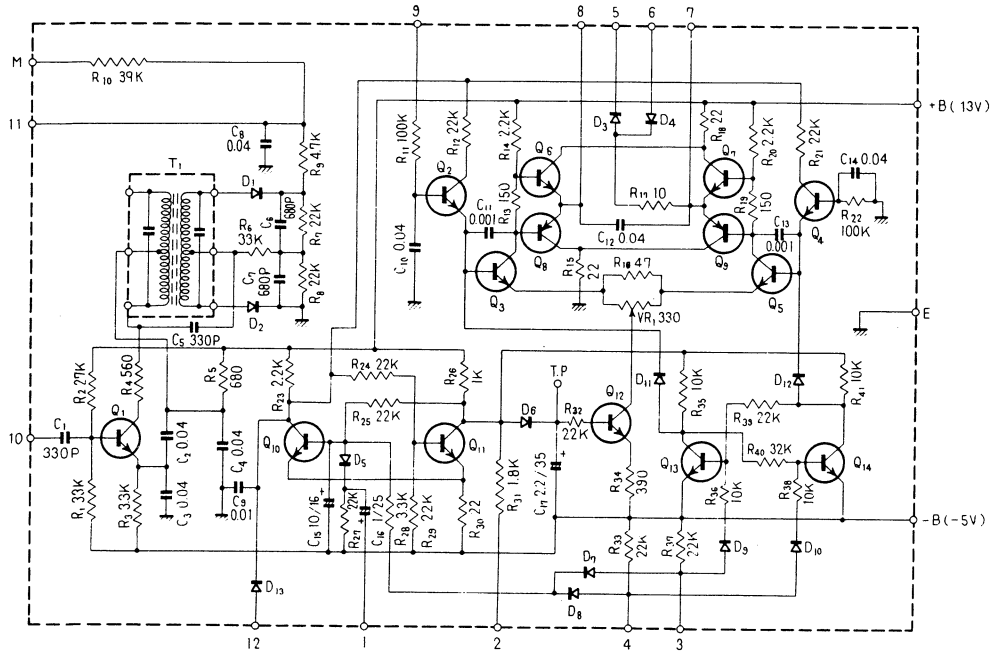
SWITCH UNIT
W26-007



AUTO TUNING UNIT

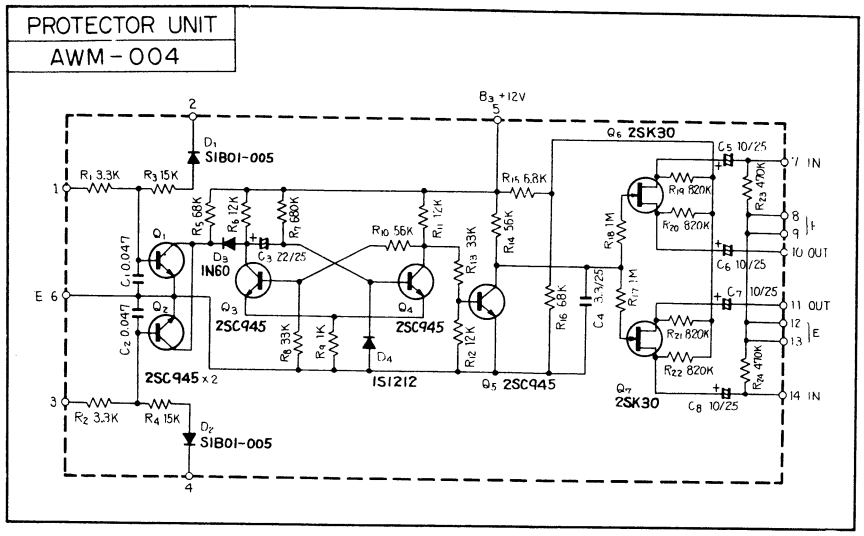
AUTO TUNING UNIT
W18 - 015

D1 ~ D10 : 1S188
Q1 ~ Q5 , Q10 ~ Q14 : 2SC870
Q6 Q7 : 2SC984
Q8 Q9 : 2SA565

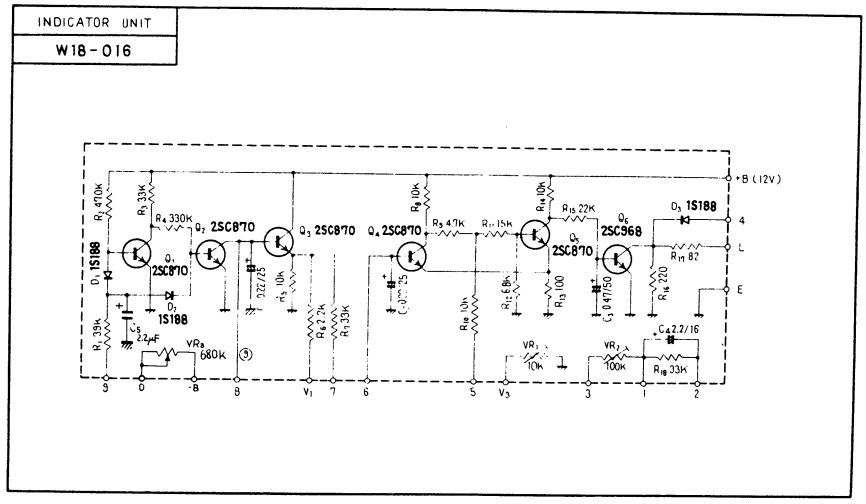


82

PROTECTOR UNIT



INDICATOR UNIT



83